

Thursday, November 11, 1982

ICL software fails second test

by John Kavanagh

ICL has been forced back to the drawing board for the second time to revise its Dilla package for controlling local authorities' direct labour organisations. The system has again been refused a seal of approval from the Chartered Institute of Public Finance and Accountancy - and ICL's local government customers are getting impatient at the company's failure to get Clifa's "preferred supplier" tag.

ICL and CMC were proposed as preferred suppliers by Clifa when legislation demanding closer control over direct labour organisations was introduced last year. Other suppliers bought the Clifa system specification and went ahead with their own packages but without the chance of a seal of approval.

CMC's product passed the Clifa test but at the end of last month ICL's Dilla failed again.

Failure to get Clifa approval has not prevented ICL selling the system - it has about 80 orders and 40 users are already using or

installing the product. But now they are urging the company to pump new effort into getting it right.

"At the end of the day this package has to work or there'll be all hell to pay," said Frank Baxendale, chairman of the Dilla user group and assistant treasurer at Lancashire County Council.

Baxendale said Dilla met the basic demands of the legislation but fell short of the minimum Clifa specification. "The seal of approval depends not only on whether the system does the job but also on issues such as documentation, ease of use and how far the system can be audited," he said.

"There are reservations, in some cases serious ones, about whether the system meets all these demands. There are certain usability problems in particular which are having extreme difficulty."

One satisfied user is Newcastle-under-Lyme District Council. "I think it is fairly easy to use - but we took a different approach,"

said chief auditor John Emery. "Instead of picking bits out of the package we decided what we wanted to achieve and made the system achieve it. We specified a dozen or so extra programs and contracted ICL to write them into Dilla for us."

Clifa is now waiting to hear ICL's plans. An ICL spokesman said: "We are meeting Clifa very soon to discuss the reasons for the failure of the system to get approval. We will then provide a plan of action - we want that approval."

Other suppliers have complained about the "preferred supplier" tag. "Some of us feel we haven't done as well as we should," said a spokesman for ABS Computers, which has sold three direct labour organisation systems, including one to the Greater London Council. "We had cases where we got to an advanced stage of negotiation with the building works department, only to be thrown out by the finance people because our system was not approved."

IDPM group aims to help end users

by John Kavanagh

USERS from all disciplines are being offered a new forum by the Institute of Data Processing Management to pool their computing experiences and discuss problems.

The aim is to help everyone from engineers to accountants to avoid pitfalls often met by users with no computing knowledge and to get the most out of their systems - with advice from the IDPM's professional members.

"Micro users in particular are often in very serious trouble," said Ted Cluff, IDPM secretary-general. "They start with simple single-user machines but grow to multiple files and multi-user systems and get up to their necks in computing. They don't understand the need for simple things like file back-up, things which are second nature to computer people."

"We at the IDPM feel we have an obligation to help end users. We don't want to make them computing professionals - we want to help them do their jobs better through computing."

"I feel that if we can raise the level of end user computing competence, we are helping the UK

generally."

The new group will be administered from the IDPM office and will have close contact at branch level, with joint meetings being held with the IDPM's data processing manager members.

There will be no entrance requirements. Normally IDPM members have to pass the institute's examinations or have 12 years' experience. But Cluff said the group might decide later that some sort of entrance qualifications were needed.

He was confident users would flock to join.



CLUFF... Pooling experience.

LINE NOISE

APPLES certainly have appeal: Apple Computer is increasing its workforce from 3,500 to 4,900 in the financial year just started. Many of these people will be working on a new business computer, code-named Lisa and for several months the subject of industry speculation.

A STANDARD version of Mumps, the interactive language and operating system, is to be offered for IBM Series 1 users next year. US company Computer Technology Inc., of Germantown Tennessee, will come out with a version compatible with the soon-to-be-official 1982 ANSI standard Mumps, which is virtually the DEC standard version already available on PDP-11s.

HARD times continue at Storage Technology, it seems. After 400 layoffs in the US there is talk of more jobs going to factories in the Republic of Ireland and Puerto Rico. And employees will treat with misgivings a Christmas present of an extra week off as the firm extends its Yuletide shut-down from one week to two.



SCHUMANN and BLECHNER... Alive to more takeovers.

Star rises to full listing

by Ron Coates

SYSTEMS house Star will next week join the bare handful of UK computer firms which have attained a full listing on the Stock Exchange.

And the London-based company will be on the look-out for other companies to buy. Earlier this year Star took over the UK arm of Hartley, the Australian accounting systems house which went into receivership in its home country.

David Blechner and Jack Schumann, Star co-chairmen, have no immediate plans for takeovers. But Blechner said: "We have done our first acquisition and found that we quite liked it. We are alive to others."

"But the problem is, of course, to make the right acquisition. If you make the wrong one it takes up management time that you find you can ill-afford."

Blechner commented on the advantages of Stock Exchange listing. "We bought Hartley by selling 300,000 shares on the unlisted securities market. The only cost to us was £10,000 worth of dividends although we paid £770,000. You could say that we bought Hartley for 10 grand."

"We have served our apprenticeship on the unlisted market - it was excellent. I can't understand why more companies haven't joined it of late."

But he also said that he felt some companies in the US would come to grief. "There will be the odd disaster and we want to distance ourselves."

It cost Star £67,000 to get a listing on the USM. "This was made up of bankers' lawyers' and accountants' fees and the cost of producing a brochure."

Star last year made a profit of £222,000 on a turnover of £4m.

600 jobs for Limerick

by Tom MacSweeney
NEW European manufacturing headquarters for Atari of California is to be in Limerick, Ireland, which Atari plans to use as the springboard for an attack on the £730 million television video games market in Europe.

Atari first set up in Ireland four years ago at Tipperary, where it now has two factories. It has promised 600 jobs by 1983 to the Industrial Development Authority which attracted Atari to Ireland.

Chief executive and chairman Raymond Kassar said in Limerick that Ireland was a "terrific springboard" for the Common Market.

NMW finally goes on to the market

NANTWICH, Cheshire-based Bureau NMW has cleared all legal hurdles and will make a long-delayed listing on the listed Securities Market on November 15.

The bureau, set up in 1979 to account for one-third of all exchange transactions made through stockbrokers offices, recently revealed mid-year profits of £305,529 on turnover of £10m.

Support for Alve

SIX leading UK software houses have strongly backed Alve, a report on future UK computer research. Logics, Palford, SDI, SPL and SSL all backed early go-ahead for the project. They say it is vital that technologies covered by the report are developed so that UK can move profitably into new markets. See story page 1.

Knight profits

RECRUITMENT firm Knight Computer International has reported half-year figures for 1981. Turnover was £2.1m and profit £215,000 but the company was way to predicted year-end of £450,000. A sixth US office opened in September - 10 months ahead of schedule.

'New standard'

A DATABASE package has soon become the standard CP/M micro's has been announced by London-based house Microcomputer Systems. Marketing the Richard Steiner claim the Rescure package costs favourably with its rivals. The collaboration of three CP/M graduates.

BIT
see page 19

Thursday November 11 1982 Number 835 35p

Slump has not dimmed demand for skilled staff

THE latest salary surveys show that the recession is beginning to bite into the computer industry. Since the beginning of the year, the rate of salary increases for computer staff has been slowing down.

But earnings for specialist staff have continued to rise, which should surprise no one.

And a full Compec recruitment supplement, an addition where 400 companies will be exhibiting and some 40,000 are expected to visit - those would all seem to be signs of a healthy and buoyant industry.

Are they? An abundance of job ads will be seen by some as a reflection of the same old problem which has always plagued the computer industry - staff shortages.

Shortages of skilled staff, that is, because there has never been a shortage of trainees.

This special supplement to the regular issue of Computer Weekly looks at a number of issues of importance.

is new? One thing in particular has been at the forefront of the news this year - the government's Information Technology campaign, which draws to a close at the end of this year.

IT82's detractors will

Baker put a human face on an otherwise faceless government initiative. It is Baker who will carry the can for the success or otherwise of IT82.

Information Technology Year is an expensive publicity exercise, an "awareness" programme, which the government hopes will get people geared up to living and working with technology, in time to take advantage of their new skills for an economic recovery - the light which the government is convinced it can see at the end of the tunnel.

But the situation we now have, according to one view put forward in this supplement, is beyond the means of parliamentary whizz-kids and faceless civil servants. The hard core effect of technological revolution is upon us now, and the

This special supplement on recruitment is one of two issues this week, the other being our regular issue plus a special Compec Preview. Compec will be held at London's Olympia next week from November 16-19. Opening hours are 10.00-18.00, with a 16.30 early closing on the last day.

tance to employers and employees. It is published in advance of Compec, our major exhibition, which will be held at Olympia in London from November 16-19.

With Compec, the major showcase for serious information technology, coming around once again, what

argue that the campaign has had little or no demonstrable effect. The response of its sponsors will be that the effects will become evident in years to come. What IT82 did provide was a face, that of Kenneth Baker MP, Minister for Information Technology.

Topics covered inside this issue

increase in employment, says Doug Evelyns. Page 6

Salary Surveys
The rate of salary increases has been slowing down in the computer industry, but earnings for specialist staff continue to rise. John Azeel analyses the figures. Page 8

Employment
The future of the computer trade will reflect the economy rather than act as a stimulant or a depressant, Paul Fisher comments. Page 10

Banking
Few people have the necessary technical skills and business expertise required for banking DP, says Emylin Williams. Page 16

DP careers
Chiff looks at the computer industry's employment prospects for the 80s, and its impact on managers. Page 3

DP training
From being a back-servicing enterprise, training has become a source of controversy, reports Simpson. Page 20

Services
Through the computing boom industry is one of the fastest growing regions, says Williams. Page 28

Sales
The supply of salesmen in the 25-35 age bracket with a track record of sales is now working at 20% below 4.1 health.

success continues to be inadequate as ever says Alan Williams. Page 18

Analysts
It is uncommon for employers to ask for qualifications from would-be analysts. They are more interested in experience, says Margaret Park. Page 30

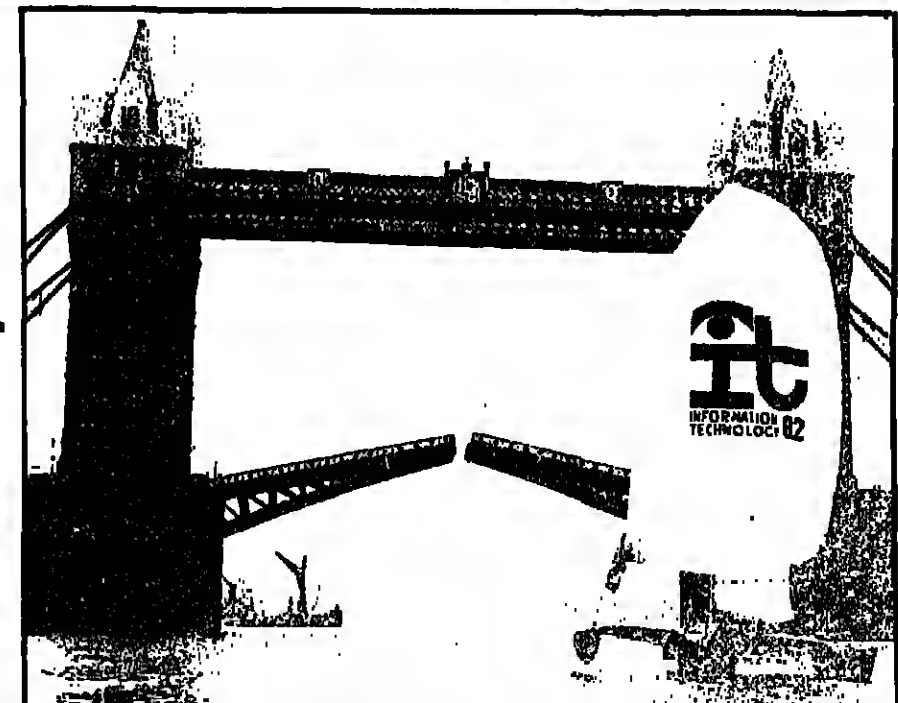
Top Jobs
Company user management may rely on the idea of gaining processing independence, but it is essential that one individual be responsible for this, says Alan Simpson. Page 34

Midlands
There are signs that the job market in the Midlands is beginning to stir, according to DP recruitment specialist there. Page 38

West Country
Bristol and the West Country has enjoyed a good deal of success in attracting high technology. Page 40

Ireland
There are now about 150 companies in Ireland involved in software production, says Della Bradshaw. Page 42

Overseas
An increasing number of DP professionals have been going abroad to seek their fortunes in 1982. Page 48



Is Information Technology's boat coming safely into harbour for employees and employers?

growth we enjoy is at the cost of the unemployed.

Employment prospects for Topp graduates still look poor, though according to another view, between 50% and 60% have found jobs. Employers who have taken on Topp graduates are invariably satisfied with them.

The remainder have been trained at the taxpayers' expense to join the dole queues or to take employment in another field altogether.

At the same time, there are an estimated 24,000 vacancies on the job market in computers. The computing

services industry is one of the most rapidly growing sectors of the UK economy, but in recent years there has been no significant increase in employment there, though average turnover is increasing at 14% a year.

Consultancies, software houses and turnkey suppliers offer the best prospects while bureaux, which constitute the largest market sector, are reducing staff, particularly in data preparation services or similar labour-intensive work.

Staff shortages on the one hand, and unemployment

on the other, reflect a crisis in training, a combined lack of formal education and experience. The British Computer Society is aware of the crisis, and fears that the problem will get worse before it gets better, especially when the recession eases and demand for computer staff increases again.

The recruitment picture varies widely between the different types of jobs.

For many companies, it is time to batten down the hatches rather than undertake expansion programmes.

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INFORMATION TECHNOLOGY YEAR

THE most photographed face of IT Year must surely belong to Kenneth Baker MP, Minister for Information Technology. With a public presence rivalled only by the Princess of Wales, we have seen Baker cutting ceremonial ribbons, patting the heads of school-children, peering intently over the shoulders of students and even, on one memorable occasion, cuddling a dog.

But the baby-kissing image, which has provoked some critics to dismiss IT Year as a massive and expensive PR exercise, is all part and parcel of Baker's mission to bring the message of information technology to the people.

For he is also the man who has adopted such emotive slogans as "automate or liquidate" and he has trekked the length and breadth of the country preaching the importance and urgency of harnessing the new technology and rescuing the world, and the UK, from decline.

Baker's appointment as Minister for Information Technology came in the grand government reshuffle of January 1981. It was a new post, including for the first time responsibility for all aspects of the computer industry. Baker was described at the time as a Heathite, a firm believer in government intervention in industry, and described himself as a "super salesman", whose job it was to spread the word of UK expertise wherever he went.

This year, the government is spending about £130 million on schemes which, in Baker's words, will "encourage the use and manufacture of IT products in the UK, and the training of a UK workforce able to ex-

A year of schemes and dreams for the government's IT-man

Judith Morris measures Baker's success in his mission to bring IT to the people

plot all the possibilities that technological advance will bring with it."

Baker has many major initiatives to his credit. The micro to schools project, for example, for which £4 million of Department of Industry money went towards putting a microcomputer in every secondary school is now extended to include 27,000 primary schools.

Although Baker himself has said "Within five years I would like to see a computer in every child's satchel",

His vision of the future does not, thankfully, include the emergence of an intellectual elite composed of computer boffins who will push the rest of us around

Training and education plays a great part in Baker's plan for an information society. However, he claims that "Information technology is not just for the gifted" and his vision of the future does not, thankfully, include the emergence of an intellectual elite composed of computer boffins who will push the rest of us around.

This argument is politically sound, too, at a time when the government is

giving them the chance to "learn a skill and find a job in our increasingly complex society."

Another of Baker's major achievements has proved to be no less controversial. The liberalisation of British Telecom, announced well over a year ago, is facing criticism from those who say it is not happening quickly enough, and others, mainly trade unions, who say that it should never happen at all.

Nevertheless, the fact that

the British Telecommunications Act - which broke BT's monopoly - should be passed at all, is no mean achievement, even if it is now becoming clear that there are unforeseen difficulties in bringing together the state corporation and private industry.

Complaints from industry that BT was setting up another closed ring of preferred suppliers have been joined by a massive trade union drive against the privatisation of BT which was demonstrated in a one-day strike by 180,000 BT employees last month.

But the Bill, which may become law next July, will still be Baker's baby, and in his own words "the most important we shall pass in this Parliament."

Against this backdrop of unrest, Baker has relentlessly pursued his policy of advocating IT enthusiasm wherever he goes. One of his main duties has been to dispel anxiety about the social and political effects of the micro revolution, which has led to many dramatic speeches, many of them defending his ambitious robotics plan.

Robots count among Baker's favourite things. His personal conviction of their place in society lies behind the Industrial Robots scheme, where companies

can receive grants of up to 33 1/3% of the total set-up costs for introducing robots on to their shop floors.

"The introduction of robotic systems is likely to lead to some loss of jobs in the manufacturing process," admits Baker. "But the analysis must not stop there. Extra jobs will flow as a result of the improved efficiency of the company. The company should be able to take advantage of the greater productivity by producing more goods at a lower price, developing new products, seeking out new applications for its products."

For all his enthusiasm, Baker is a realist at heart. He knows perfectly well that the UK will never be a driving force in the information technology industry. "Part of my job," he says "is to make sure that Britain's inventiveness does not run into the sands again." We must be selective, he told the Tory Party Conference in Brighton last month.

He added that next year the government plans to spend £173 million on support for science and technology, a figure which falls significantly short of the £350 million scheme envisaged by the recently published Alvey report.

Although still being discussed, the government



BAKER... For all his enthusiasm, a realist at heart

Baker's policies include an attack on the "micro" industry, which is producing a general poor economic performance. However, Baker's information policy report should be seen in the context of his own information. "We are this year 'If we are proud of it they are the most direct withdrawal symptoms."

As Information Technology Year draws close, it will be interesting to see how Ken Baker at the Ministry of Industry is faring with his public relations campaign. What will become of it?

PROSPECTS IN THE '80s

Many companies have 'frozen' the filling of computer vacancies, says Ted Cluff

'No one will come into DP without some qualification'

To look at the job advertisements in Computer Weekly, one could easily believe that nothing had changed in the past five years and that prospects in data processing were as buoyant as ever.

It was then commonplace to talk in terms of 24,000 vacancies in DP. But it would be a brave person indeed who applied the same figure to 1982 in spite of the fact that the industry has expanded significantly since 1977/78.

Taking expansion figures of both 15% and 25% per annum in connection with extrapolations over the remainder of the '80s, it would not seem unreasonable to assume something between the two during the last five years in spite of recessionary pressures.

Although probably not strictly related, professional membership of the IDPM has expanded by 79% over the last 3 1/2 years.

Looked at from another angle, the employment position in DP since the recession started - and it didn't reach its present serious proportions all at once, it was an accelerating process - has looked positively gloomy.

Evidence of this is the number of IDPM members who have become redundant, often by virtue of their companies just ceasing to trade. A few have actually felt the stigma of redundancy for a second time, but this is more the product of statistical chance than their own shortcomings.

It is what has happened to those who have lost their jobs which is important. Of those who come to one's attention, all have obtained a new position. Some have found a job quickly but others have taken several months to find something suitable.

"Suitable" might be too strong a word because as the weeks slip by, a number have been willing to take a

Over and over again, one hears glowing reports from employers about Tops people

position which they might have turned down in better times. But accustomed standards of living are a powerful incentive.

Not surprisingly, the older the person, the more difficult it is to find a new position. One member of the IDPM at 58, a data processing manager, viewed his prospect with alarm when his company was forced to stop trading.

Geographical situation has an impact not normally taken into account. A good job at an installation in pastoral surroundings, accepted a few years ago seemed great. Ten minutes by car from home, a more leisurely way of life, no rat race, splendid for the family, a large vegetable patch and what more can one want?

The company closes and there are only two other installations within 25 miles. Statistically, the chances of a vacancy at the right level and right salary are close to zero.

Looked at from the view of the Tops graduate, the employment prospects in data processing right now seem poor. This is because of the number of Tops people who fail to get a position but do get publicity.

Yet something between 50% and 60% have been obtaining positions without too much trouble. Over and over again, one hears glowing reports from employers about their satisfaction with Tops people.

Quite unequivocally, I have to state that so far, I have not had a single poor report. Nevertheless, it is far from satisfactory if something like 40% of those trained with taxpayers' money cannot find a job in DP because of the usual demand for experienced people.

Let us all be very clear about the consequences. Although we know (or shall we say hope) that the recession will decline one day, if a switch were thrown to lift its effects within a very short period, our industry would be so short of those with two years' experience that it would make the previous occasion of this kind seem an irrelevance.

An industry growing at 15% to 25% per annum in difficult times and not at the same time providing job opportunities for the already inadequate numbers being trained, must expect, and will suffer from, major market distortions when the day of reckoning arrives.

So, are there really 24,000 vacancies out there still?

Of course, it is difficult to say with certainty but there are a large number of companies which have "frozen" the filling of any vacancies in the DP department. For the sake of their economic well-being as much as it may be, they are prepared to suffer the consequences of squeezing DP below its normally inadequate establishment.

But there comes a time when a case has to be argued that if a specific vacancy is not filled, the DP department could become quite impotent. It follows that the true position is concealed.

Having said that, it is clear that there is no lack of people willing to come forward and be trained for work in data processing. The BEC/TEC classes up and down the country are well supported; so are the ONCOND classes. The take-up for Threshold and Tops places continues to be vigorous.

This is to say nothing of the IDPM student growth which has been well over 300% since March 1979. The number of IDPM students sitting our examinations in December will also be a record.

What this means is that we are virtually at the stage where one will enter DP without some qualification, as distinct from the days when many of us entered by accident or (bad) luck.

One interesting consequence of the economic situation has had a marked effect on DP employment. We have customarily talked in terms of a permanent 10% shortage below establishment coupled with a 25% annual turnover. Many are now working at 20% be-

low establishments permanently reduced. But the turnover has dropped.

Of course, a lack of leavers means no need for replacements, which disguises the job market prospects when compared to 1978.

So what are the prospects for the future? There are a number of interacting forces, with the final outcome depending to a large extent on the product mix.

The major issue is the future of our country as a trading nation. We already know the impact of imports from the US and Japan. Unless companies in the UK improve their productivity by massive injections of computer-based office automation equipment, there will be a gradual decline to cottage industries, one of which will be software written from home (and no offence here to F International which can hardly be

There may be a gradual decline to cottage industries.

described as a cottage industry, with over 700 home-based staff).

If on the other hand we manage to face up to and remedy our known deficiencies, one can envisage three main developments, the embryos for all of which are with us today.

The first concerns the prognostications of those commentators who forecast the end of the application programmer. This is often taken to mean the end of programming as we know it, with the implication that programming is a dead end.

Conversely, there is a view that simply because we are unable to significantly increase programmer productivity, the alternative uncontrolled growth in programmer population is a price too nation can afford.

The number of programmers employed will continue to grow but they will be distributed differently from present practice. One can virtually envisage an end to in-house programming in the small and medium-to-small installations, with replacement by package programs and software houses. The larger installations will suffer some decline in in-house application programmer resources for similar reasons.

The born programmers - those who prefer "bit-twiddling" above everything else - will drift inexorably to the software houses and the larger installations which will continue to be faced with complex problems, particularly those involving telecommunications.

The second development concerns the users who, whether we like it or not, will become more and more involved in doing their own thing. James Martin believes that by the end of the decade, they will produce 50% of their needs without professional help.

What about the other 50%? The needs of some will be met by application packages and software houses, but most will be met by a healthy interaction be-

tween users and DP professionals working together in a quite different way.

Trafalgar Borough Council is already working this way with software tools such as Ramis II for fast development of prototype files for the user to test out requirements. The user also takes responsibility for much of the input and output programs which the DP professionals fit into the final package.

This calls both for a high degree of professionalism from the DP staff and a very flexible attitude of mind. Since the growing need for improvements in productivity and faster development times are achievable this way, there can be no doubt that this will have a major impact on the way we work in future, even though not

everyone in DP today is capable of operating in such an environment.

Finally, people working in data processing today have a great responsibility which many of them are unwilling to face up to. This concerns the need to play a major role in office automation procedures.

A phased approach over several years using multi-vendor equipment represents a challenge of some magnitude. Without, I hope, resorting to cheap clichés, this challenge also throws up opportunities far beyond the initial introduction of computer technology and its subsequent development into the broad data processing concept.

Ted Cluff is secretary-general of the Institute of Data Processing Management.



CLUFF... Major issue is the future of the UK as a trading nation.

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COMPUTING SERVICES

The services industry is expanding, but employment in the sector has not increased Douglas Eyeions reports

THE computing services industry has been one of the most rapidly growing sectors of the UK economy in recent years. But it comes as a shock to realise that there has been no significant increase in employment in computing services during the last year.

After growing at about 8% per annum throughout the 1970s, the number of people employed in computing services companies has shown no overall growth in the 1980s.

The annual survey carried out among the Computing Services Association's (CSA) member companies, published in September this year showed that there had been a total growth of about 1 1/2% in staff numbers, to bring the total number of staff employed by the 183 member companies to 26,800.

One and a half per cent is not statistically significant because of the wide scatter among the respondent companies. In a separate survey of the top 20 employers in the UK computing services industry, only five companies reported a significant increase in staff during 1981, with nine reporting a very significant decrease in the total number of staff employed.

The employment situation is patchy. The general pattern that emerges is that the percentage increase in staff is negligible for large companies, but becomes an appreciable percentage for the small companies which are continuing to grow in spite of the recession.

The total revenues of the companies are increasing at an average rate of over 14%

A versatile job-hunter should go where the growth is — sales

per annum, which is keeping ahead of inflation so that there is some real growth in productivity.

Computing service companies are shedding surplus staff whenever the opportunity arises, to improve the competitiveness and profitability during the period of economic recession. One company reported a 30% increase in revenue for a 14% increase in staff during the last year, while another reported over 20% growth in revenue for a decrease in staff of 10%.

The companies which are doing well and offer the best prospects of employment are the consultancies, software houses, systems houses and turnkey suppliers. The main reductions in staff are being experienced by the bureaux, which constitute the largest sector of the market.

Many of the large bureaux have had substantial redundancies during the last year and many others have reduced numbers by "natural wastage" or by transferring staff into non-bureau activities.

There are several reasons for this reduction in the employment opportunities offered by service bureaux. The most obvious problem during the recession has been the fall-off in the number of transactions be-

ing processed by the bureaux. This is no different from the problems being experienced by airlines or hotels and represents a lowering in general economic activity.

If there are more unemployed people, then there are fewer payrolls to process. If people are buying less, then there will be fewer invoices to process.

The next reason why bureaux are employing fewer operational staff arises from the changes that are taking place from the old batch processing days. Women who worked in data preparation were the first to experience this reduction in employment. The number of women employed in the bureaux dropped from 30% of all computing services staff in 1971, to 8.8% in 1981.

Data control staff and computer operators, who grew considerably in number in the mid-70s, are now beginning to decline. More and more responsibility is being handed back to the customers so that the bureaux are sharing the labour-intensive activities.

Remote batch entry, interactive and time sharing services all require fewer data preparation staff, operators and data control staff. Intelligent terminals now allow a great deal of

editing to be done on input data so that fewer human beings are required at the central processor to handle the increasing amount of work which is being processed on a routine basis.

This trend is now spreading to disc handling and tape handling. Magnetic tapes are being used less frequently in favour of disc mass storage devices. Disc loading is being reduced as fixed discs grow in popularity, and so the need for operators is beginning to fall off.

A major cause of the drop in demand for bureau staff arises from the move of customers away from bureaux to standalone minicomputers and microcomputers. Bureau proprietors recognise this trend and are increasingly involved in the installation of hardware on their customers premises so that they are diversifying into new businesses.

But this does not alter the drop in loading of the bureau computers and this trend has accounted for the shedding of many bureau staff during the past difficult year.

Prospects for programmers are much brighter, but even here actual employment has levelled out rather than increased. There is undoubtedly an increase in demand for software for all sizes of computer. But the move to software products and application packages is reducing the proportion of custom-built programming

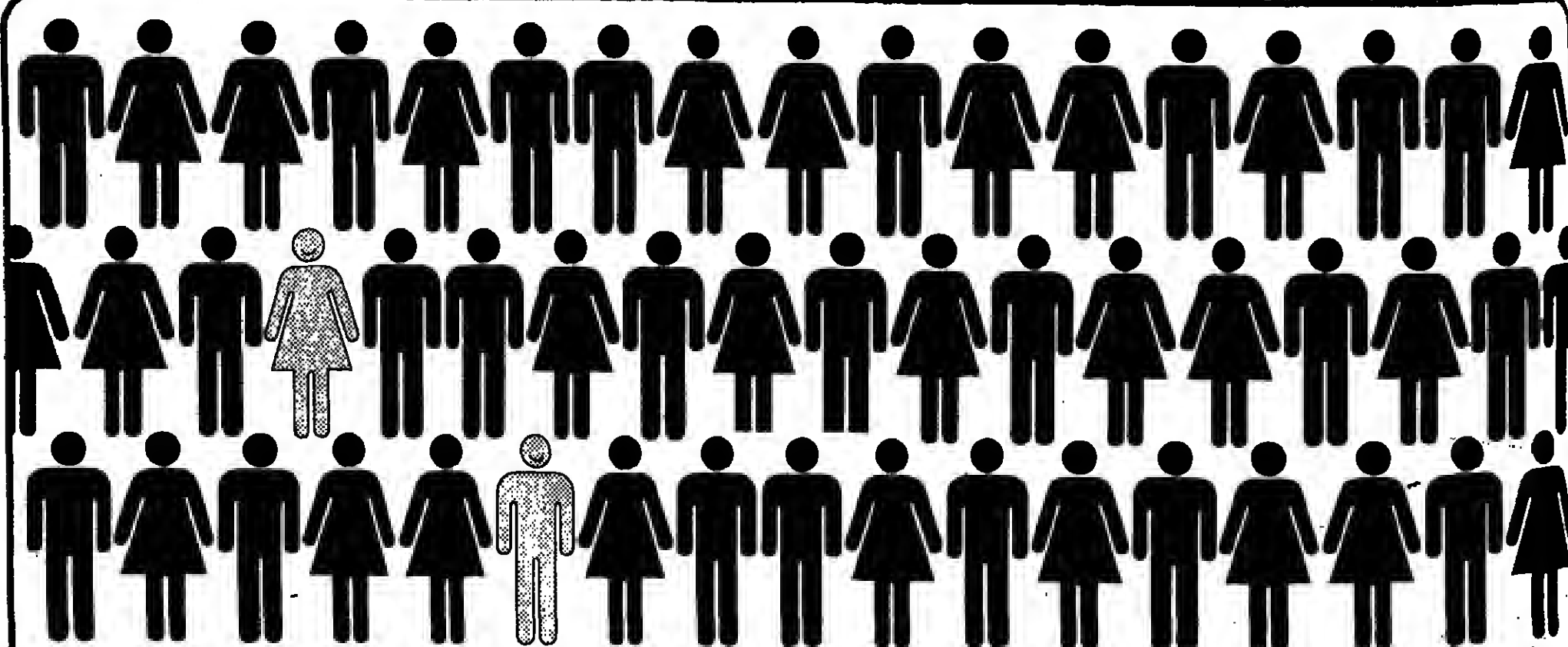
carried out by the computing services companies. The increase in demand for software is largely being met by the sale of software products and, of course, the labour requirement to write a software package which sells many hundreds of copies is not all that much greater than the programming effort required to write one custom-built solution for the same application.

It is therefore not surprising that the number of people involved in selling in this sector of the services industry is growing significantly in spite of the recession. Salespeople accounted for only 4% of computing services personnel in 1973 — this percentage had more than doubled in 1981. In absolute figures, the growth is even more impressive.

The number of salespeople has trebled during the last decade to well over 2,000 at present. With the move towards application packages and turnkey solutions, the requirement for salespeople will continue to grow. The best advice to a versatile person seeking employment in the computing services business is go into sales, because this is where the prospects of employment are best, and incidentally, where success is probably most generously rewarded.



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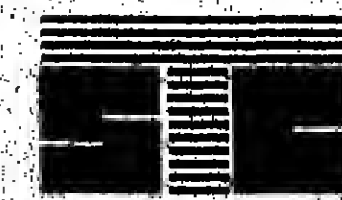
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SALARY SURVEYS

Pay rises in computing look promising for the coming year

John Aczel examines wage trends in the past year and makes some predictions

THE overall rise in salaries has been slowing down in the computer sector, and this trend has been evident since the beginning of the year. Earnings for specialist staff, however, have continued to rise appreciably, as there is still a shortage of certain grades of highly skilled personnel with the right type of experience.

These conclusions can be derived from the latest survey carried out by the Computer User's Year Book. The investigation is conducted every year, and is based on an analysis of the salaries received by over 22,000 personnel employed in the computer industry. Nearly 1,300 computer installations were included in this survey, which usually carries considerable weight within the computer industry, particularly for salary negotiations.

The breakdowns given in the Computer User's Year Book's investigation are detailed, and show salaries analysed by various job categories, such as data processing manager, chief system analyst, programmer and other job titles. In addition, the figures are broken down by other categories, such as regions and location.

According to this survey, salaries of data processing personnel went up by an average of 7.7% in the

twelve months ending in April 1982. This growth was considerably less than in previous years, when salaries rose by 15.4% in 1981, and by over 21% in 1980. Evidently, there were considerable variations among computer grades, ranging from less than four per cent to over 14%, depending on job title.

Highly skilled personnel with specialist knowledge were in great demand, and their salaries recorded an

been quite small and have been affected by the recession and the downturn in the general economy. Thus, overall wages and salaries in British industry have gone up about 6.5% on an annual basis, whereas the computer sector has enjoyed a higher increase during this period.

When measured against the rate of inflation, salaries in the computer sector have not moved up as much as retail prices. According to the latest official statistics,

Those in the higher salary brackets, that is £18,000 or over, stand a very good chance of having a company car, as over 70% had this facility in 1982

above average increase during this period. In particular, systems programmers had a rise of 11.7% in earnings, while senior programmers had a growth in salary of 10.8%.

In contrast, salaries of trainees went up by less than 5.5%, while a similar trend could also be seen for certain types of computer operators.

The growth in salaries in the computer sector has compared favourably with other industries - in many sectors, salary rises have

inflationary trends went up by about nine per cent up to the second quarter of 1982, though, since then, the rate of price increases has slowed down and is now believed to be about seven per cent.

There were many reasons for the slowdown in salary increases, but one of the main factors has been the dramatic fall in inflationary trends. For instance, retail prices in 1980 went up by 12%, while in 1981, the rate of inflation was about 18%. Another important lo-

fluence has been the trend in employment in the computer industry. There have been considerable cutbacks in the level of employment in the computer hardware sector, with the number of full-time employees falling by over five per cent among leading computer companies. Moreover, unemployment in the hardware industry has increased, with the total rising to over 12% of the total labour force.

According to Dr Doug Eyskens, director general of the Computing Services Association, there has also been a shake-out in the computer services sector, with many firms looking at their staff requirements closely. The latest figures indicate that full-time employment in this sector has dropped by about two per cent compared to 1981.

Another important influence has been that many companies have seen their profit margins under pressure through tough competition, and, as a result, they have been keen to control their costs as much as possible.

Naturally, salary increases do not provide the full picture for remuneration, as fringe benefits now play an important part in staff payments in some areas. The Computer User's Year Book analyses certain

types of fringe benefits, such as the provision of company cars.

On the whole, there has been a small increase in the number of DP managers receiving company cars in 1982, though this trend has varied according to the type of job and the location of each firm.

In 1982, nearly 56% of all DP managers had a company car as against 53% in the previous year, though there has been a drop in the percentage of operations managers with company cars.

On the whole, computer managers in London and the South-east tend to receive more fringe benefits than their counterparts in the North and other parts of England. The survey shows that nearly 60% of DP managers in the South had company cars in 1982, as against only 51% in the rest of the country.

In addition, those in the higher salary brackets, that is £18,000 or over, stand a very good chance of having a company car, as over 70% had this facility in 1982 as against less than 64% in 1981.

There are considerable variations to the salary structure of the computer industry, depending on the size of the company. The differences can be as much

as 20%, and, normally, larger companies will pay more than a smaller one by a significant margin.

These results are contained in a recent survey published by Reward Regional Surveys. This company releases its results every March and September.

It should be stressed that the investigation carried out by Reward Regional Surveys are normally not as extensive as those by Computer User's Year Book, as only about six hundred companies are included in the sample nationwide.

According to Reward, variations occur according to the regional factors, and, as one would expect, London and the South-east show some of the highest pay structures. But one interesting figure which this survey throws up is that Scotland is now among the highest paying regions in the UK, and, in some cases, provides better rewards than the London area. In September 1982, for example, a computing manager in the London area would earn about £15,433, compared to £16,164 in Scotland.

It is difficult to predict the prospects for salary increases. For one thing, the trend in the general economy in terms of growth and employment have to be taken into account. At present, it appears that some recovery in economic activity may occur during the next 12 months.

Inflation is another important factor, and many commentators are now confident that the rate of price increases will slow down even further. It may fall to about six per cent per annum during the coming years which will be one of the lowest rates of inflation

for many years. A key factor, however, will be the level of unemployment in the computer industry. Falling unemployment is not likely to be pronounced over the next 12 months, but many computer hardware companies will look for further reductions and streamlining of their operations over the next few months.

In the case of the computer services sector, prospects for employment are bright, and, as total billing has speeded up, it is unlikely any further fall in salaries will occur, and some types of personnel could be in demand over the next twelve months.

On balance, it is expected that employment levels will remain fairly stable, and the reductions which have occurred in recent months will not be repeated in 1983.

If this background is correct, this will provide an encouraging environment for salary increases. As of the economic climate, financial constraints, and rises will be carefully by many companies, and, unlike the growth in inflation, the growth in salaries will probably be at the same level as inflation.

Thus, average hourly pay per cent per year is likely, while some highly skilled personnel could receive increases of 10% or more.

All in all, the salary gains in the computer industry look most promising over the next year, and, moreover, higher benefits are also likely to be given to attract the type of personnel who are in the services sector.

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Project Leader S/W Releases

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Wilt. £8-12K
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DEC Prog/Analysts

Beds. to £10,000
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Programmers Minis/Micros

Barks. £7-12K
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LABOUR DEMAND

Paul Fisher reports on the employment prospects in computing

Industry is looking for staff with specialist skills

RECRUITMENT into the computer trade has levelled out with the demand for labour remaining similar to this time last year. If not growing, it nonetheless remains a fairly healthy business to be working in.

Computer people are changing jobs at about the same rate as last year. Computer Weekly continues to thrive on much the same number of job advertisements, this Compec supplement is still a substantial publishing venture and the Compec show itself will pack 40,000 fully employed individuals through its turnstiles.

Compec's hordes will be a fair cross-section of the trade as a whole. There will be no discernible orthodoxy among them about the question of computers creating or destroying jobs. Some would push the line that digital technology is essentially labour saving and that is a vital part of many a sales pitch, however discreetly introduced.

Others would sit on the fence and talk of increased efficiency and redirection of labour, while optimists would assert that the technology on display creates fresh demands for new services.

People outside the computer trade have a far simpler view and hold that technology destroys jobs. This is hardly surprising

when the creation of poverty and unemployment on a scale to match the Thirties has coincided with endless hullabaloo about new technology.

Since the Tories came to power, unemployment has kept from a little over five per cent to nearly 14% of the workforce. Of the 3.3 million people now drawing dole, 400,000 have been doing so for two years. While workers in heavy manufacturing and the public sector have seen their jobs disappear, workers in the computer trade have prospered.

Is Compec, with its conspicuous display of commercial techno-brightness, the place to point an accusing finger? Many would say it is, and they can back the "More technology equals less jobs" claim with arguments of some substance. Take for instance, a Labour Research Bargaining Report which examined 127 offices where modern equipment had been installed. It found that a third of them had reported job losses.

Perhaps that is all the less reason to blame automation, because in those 40 or so offices efficiency had been increased. Perhaps it is a problem of the economy as a whole if those who were made redundant can't find more productive employment than merely doing what a word processor can

do better.

If the economy continues to stagnate, then technology will take a portion of the blame for further unemployment. It doesn't have to be this way though. Computers do not exist in a situation of static demand, there is no fixed amount of goods and services required.

Technology can, and should be, a tool for creating prosperity. To take a banal example, during the time that UK unemployment has all but tripled, Japanese unemployment has all but doubled - from one per cent to two per cent. It would be difficult to blame that on technology.

Having become as firmly established in society's infrastructure as the motorway network, the future of the computer trade will now tend to reflect the economy rather than act as a stimulant or a depressant.

To concentrate investment in service sectors of technology might not be particularly productive. Increased investment here would, of itself, have a relatively small impact on unemployment.

Even the vastly optimistic Report on Cable Systems, commissioned by the government and prepared by the Information Technology Advisory Panel, did not anticipate any huge effects on employment.

Optimism will rule at

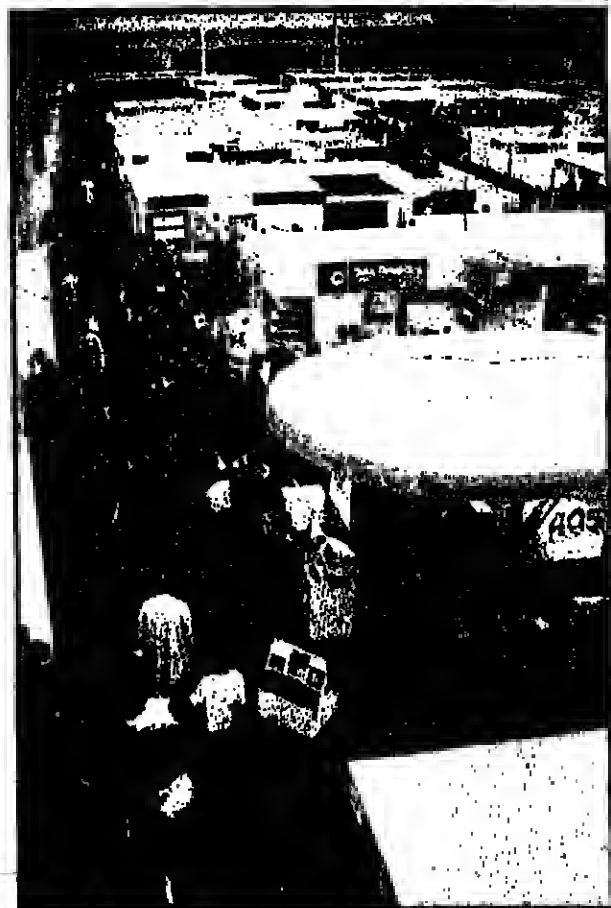
Compec. Among the exhibits there will be even fewer mainframe products in evidence than last year, with more emphasis on products for smaller localised computing needs. There has been a corresponding shift in the demand for labour, a factor borne out by the experience of recruitment agencies.

Alan Williams, of Sales and Marketing Recruitment points to communications and microcomputing as growth areas but does not see micros creating much demand for labour.

This is partly because they are manufactured in the US or Japan and partly because of their tendency to rely on packaged software. And the demand for packaged software he thinks is spreading upwards from small systems into tightrope things up to the market for programmers.

Les Clarke, manager of Knights Programming Support, has a similar report. Demand for manual DP work has dropped as has the demand for Cobol programmers. Clarke reckons he has placed 20% more contract programmers this year although this could be an indication that employers are no longer prepared to hire permanently.

Clarke has looked abroad to expand his business and what UK growth there has been for him has come with



Compec's hordes will be a fair cross-section of the trade.

scientific work, particularly for programmers with skills in Fortran.

If Hewlett-Packard is anything to go by, employers are getting very picky indeed. HP has recently opened a software R&D centre (significantly enough for office products) and says it chose the UK as one of the best sources in the world for computer science graduates. Before hiring 14 graduates, it interviewed no fewer than 400 applicants.

Looking at other established computer manufacturers, it is clear that their

labour demand is fairly static.

On August 31 this year ICL had 23,830 on its payroll, of whom nearly one third are working abroad. That is a reduction from 1981 when it employed 25,564 and a further reduction from 1980 when it employed 33,087. However, for the first time in three years it has taken on graduates with 300 fresh college leavers coming on to its books this Autumn.

IBM has had a more modest demand for graduates and only took on 72 this year, most of them into

systems engineering. It "expects to employ more next year". Meanwhile it has kept its UK staffing at a constant 15,000 since 1980 with a turnover well under five per cent.

For the unskilled newcomer to computing, things are tougher than ever. The Manpower Services Commission trained 4,300 under the Tops scheme between April 1981/2 and 1,480 under the Threshold scheme.

An MSC spokesman says: "We anticipate no upturn in demand for the next year and therefore our intake to the courses will remain constant."

Another indicator of lack of buoyancy in computer recruitment is what those already employed have negotiated in this year's pay round. The most recent Computer User's Year Book carries a survey of 1,289 DP sites and reports a below inflation salary increase averaging out at 7.7%. This compares with over 15% in 1981. Skill and position claimed the largest increase with systems programmers getting 11.6% and data processing managers nearly 10%. Operators only managed four per cent.

To conclude, the computer recruitment market is a fairly good shape. Demand is shifting from mainframe skills to more specialised skills in micros and communications. As ever, skill is a premium. Overall there have been few signs of growth this year and, as long as the recession continues, any growth there is will be local.

Compared with computing in the Seventies, things are on the gloomy side, it's a more difficult industry for the newcomer to enter and the rewards are no longer increasing exponentially.

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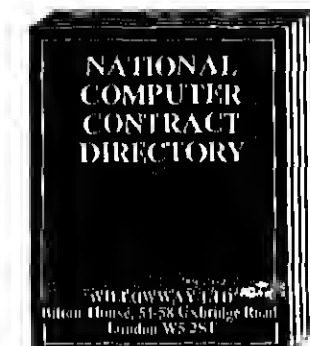
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PREFERRED UK WORK LOCATIONS:	
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WHEN WILL YOU BE ABLE TO START YOUR NEXT CONTRACT? MONTH YEAR	
HARDWARE EXPERIENCE	PROGRAMMING LANGUAGES
MONTHS	MONTHS
APPLICATIONS SOFTWARE	SYSTEMS SOFTWARE
MONTHS	MONTHS
ENVIRONMENT	ENVIRONMENT
MONTHS	MONTHS

JOB CATEGORIES

CATEGORY	NO OF YRS	CATEGORY PREFERRED
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ANALYST		
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SYSTIME

Handwritten note: See also 1010

A few of our exhibitors

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Progressive computer equipment manufacturer urgently needs a competent all-rounder, as No 2 to the OPM, to undertake all aspects of their major systems development programme in the Financial and Field Service application areas. Current systems are running on ICL System 10, IBM Series 1 and micro, with ICL System 25 planned for the near future. Essential requirements are two years programming experience and four years analysis/design, ideally including online projects in a related field.

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BANKING

No easy solutions to the banks' requirements

Emlyn Williams looks at how recruitment firms can serve banks

THERE are three industries, above all others, which directly reflect the evolution of the world in economic, political and social terms. They have tended to develop requirements which have driven information technology ahead, rather than simply making use of advancing technology.

These industries are aerospace, oil (particularly exploration) and banking. It is not by accident that they spend vast sums in the creation of information systems, since their performances have to be of the highest order. Nowhere is this more true than in banking, which is inevitably the institution whereby world trading and the processes of living are sustained.

Of late, much publicity has been given to some of the problems facing the world of international banking, in particular, and doubt has been voiced in many quarters about the safety of the world banking system. Such problems have been exacerbated as it has become increasingly difficult for banks to raise enough funds to meet the ever-increasing requirements of international trade and country funding.

This fund-raising difficulty is the result of two fundamental considerations: 1. There is now very little surplus of money circulating within the banking community — for example, the OPEC countries now have a current account deficit of \$9 billion up to September 1982.

2. The banks now experience much greater competition for money from such quarters as building societies and trust companies.

This all adds up to the fact that large banks, particularly international banks, see a marketing shift in their future — for example, reduced lending to countries which have difficulty in repaying their loans.

Consequently, the multinationals, large corporations and institutions have become a more attractive proposition, since their business is international and therefore slightly less subject to the fortunes of one country. Competition for this sector is going to be more severe than ever before, and the key to success lies with the banks which are best at satisfying these clients on a world-wide basis.

This means that banking services will become more specialised among the larger banks, with the small and medium sized banks pursuing their own specialisations.

Despite a temporary lapse in demand for qualified personnel, the banks will inevitably look for certain key skills to meet and overcome challenges to their future. More than ever before, multi-disciplined teams to chart the way ahead will be needed.

Foremost among the technical disciplines required will be proven database management and communications expertise. Since the banks will be looking to their future requirements, a broad and detailed knowledge of banking in

both technical and business terms will be required, causing a real demand for senior technical managers and project managers with experience in this field, to co-ordinate, guide, and measure development of what will be large, multi-disciplined projects.

Inevitably there are very few people who will be able to provide all the necessary skills; consequently demand will exist for each skill to be able to inter-relate closely with the others.

Such inter-relationship will occur along parallel lines, and will therefore require key personnel to possess the ability to relate laterally to each other, as well as forwards to cover forward thinking.

Complementary to such key skills will be sustained demand for personnel with systems knowledge and implementation experience within banking, who quite often will have to be capable of working in dispersed overseas environments on detailed adaptation of application software standardised for global use within a bank.

Demand will remain for IBM 38/4300, etc, experience, including RPG/II and Cobol, CICS, DL/1, etc. But microcomputers will increasingly penetrate banking and the advent of 16- and 32-bit micros will necessitate design knowledge of transaction processing and the ability to write high performance front-end and

line updating software.

Increasing emphasis will be placed on application dedicated, sophisticated, micro-based systems linking into mainframes and ultra large, dispersed function processors. Particular expertise will be required in the design, integration and evolution of such systems for the mid to late '80s.

A picture now emerges, the effect of which is to produce converging considerations, identified as follows:

1. Banks will have requirements for which there is no easy way to find a solution: the inevitable intellectual incest of a closed environment will drive banks — just as in the past — to go out and seek fresh key expertise, to infuse new impetus to the planning and implementation of systems.

2. Specialist DP recruitment concerns (involved in communications, database, etc) — in the same way as bank personnel departments and software houses — are going to find it increasingly less cost-effective to supply a bank with multi-discipline skill requirements on their own. It is necessary for the recruitment agency involved to possess a real track record and in-depth understanding of the intended discipline and specialist systems areas involved.

It will be economic naïveté to attempt to supply key skills in banks without the ability to demonstrate adequately a real under-

standing in this field. Since so much will be at stake for bank, market response will be very selective and biased towards agencies which demonstrate in-depth understanding, creating credibility and professional trust.

Where does the solution lie? The successful recruitment specialists will see the true economic sense (the marketing costs are counted for) of syndicating together to supply a major client — in much the same manner as banks do when funding a large loan — yielding greater net revenue per syndicate member. In this way a one-stop supply source of skills will be established.

The composition of such a syndicate would comprise a specialist recruitment concern exclusively involved in supplying the banking and insurance fields, plus member agencies with a track record and expertise in finding and supplying specialist skills.

The initial effect would tend to be the reduction of individual placement revenue, but would provide two major benefits: greater placement opportunities per agency in a specialist and still most affluent market; and higher net revenue since marketing costs would be dramatically reduced.

Emlyn Williams is managing director of Lombard Systems International.



Banking is one industry which has driven information technology ahead.

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THE SALES RECRUITMENT SCENE

Alan Williams warns that, as the technological revolution bites, 'things could get much worse for some companies'

LOOKING back at my notes for 1980 the most significant thing to strike me was the comments I made about unemployment in that year. Two million out of work seemed to be a very big number then, yet here we are two years later with twice that figure (if you take into account those people who do not or cannot register as unemployed).

At that time I was having trouble convincing people we would have five million unemployed by 1985, and while no one actually laughed at my unfunny prediction, I don't think it was taken too seriously either. The way things are it seems we won't even have to wait that long.

I believe it is only just beginning to dawn on some politicians, but certainly not all, that we have a situation on our hands that is beyond the means of parliamentary whizz-kids and faceless civil servants.

The hard core effect of technological revolution is upon us and only tomorrow, via the means of that exact science hindsight, will we discover who paid the price for this "brave new world".

It is so easy to be complacent within an industry such as ours which continues to enjoy a significant overall growth despite difficulties in some areas, much of which is unquestionably at the cost of many of those who have already or will eventually join the ranks of the unemployed. Yet there are signs that things could get much worse for some computer companies and problems of survival will not be limited to the new or small companies.

Many long-established

Small, up-and-coming firms doing better than the 'giants'



WILLIAMS... "The situation is beyond the means of parliamentary whizz-kids."

major computer suppliers will need to do some deep thinking and carry out some draconian actions if they intend to be around much longer.

There is at least some comfort in the fact that there appears to have been no significant reduction in the amount of recruitment advertising since 1980.

Some of us continue to be busy with a comprehensive portfolio of job vacancies and client assignments but the overall picture is certainly affected by some

major suppliers who currently have a formal or informal freeze on recruitment. In some cases this involves personnel of all types; in others salespeople are excluded. In some circumstances there have already been redundancies, in others the primary purpose of stopping further recruitment is to reduce the headcount by way of natural attrition.

The nature of response to advertising continues to be unpredictable in both volume and quality and thus

we are unable to perceive any meaningful trend in the movement of salespeople. Certainly the response for management jobs has been as good as ever and conversely the supply of salesmen in the 25-35 age bracket with a proven track record of sales success within any significant sector of the computer industry continues to be as inadequate as ever.

Sales trainees don't stand much chance in any part of the industry, be they graduates new to the business,

technicians wanting to get into selling, experienced salespeople from outside computing, or even those wishing to make a quantum leap from one computer product area to another.

What is the reality of the marketplace at present? Well, as ever, there is some bad news and some good news.

At the top end of the scale there has been and will be much reorganisation, rationalisation and even retraction among parts of the mainframe sector within a marketplace that appears to be at best static in terms of overall revenue growth.

In their last fiscal year some companies turned in performances against revenue target little better than 70% with individual branches barely achieving more than 20%. Others did reasonably well, but there were no "high flyers".

The minicomputer sector has not been without its problems either with some major manufacturers still applying a complete ban on all sales recruitment. The situation has much improved in the last few months, but one could hardly say this part of the industry is buoyant.

Last year there was considerable euphoria within the CAD/CAM sector with promises of vast revenues and considerable riches to

be gained by the army of salespeople required by several relatively new entrants to the marketplace. Unfortunately things appear to have gone quiet.

On the good news side some parts of the computer industry continue to do extremely well while others are positively booming.

Microcomputers obviously head the list with tremendous growth not only in the small business sector and throughout major corporations and institutions, but also the technical and industrial areas, particularly control systems. The opportunities this success creates for salespeople lie primarily within OEM/distributor sales for manufacturers or main agents. Selling one-off, low cost turnkey micro systems should be approached with caution as there is often insufficient profit margin to justify the cost of direct sales.

Suppliers of telecommunications equipment also appear to be doing well at all levels from modems and multiplexers to terminals and total front-end systems.

The financial pressures of economic recession have also had the effect of increasing the acquisition of external expertise as opposed to locating the costs of growing it or sustaining it internally. Consequently there has been a significant

upturn in the demand for turnkey solutions in the form of both total data processing systems and software packages. The increased use of contract personnel also comes into this category.

One dominating factor within this scenario is that, by and large, the small up-and-coming companies based on the latest technology products are generally doing better than the giants of the establishment.

For many salespeople who perceive within this situation the need to search for new pastures, these new upstarts offer the excitement, challenge and relative freedom of working within a small company environment. On the other hand they also imply much greater individual exposure.

Success or failure is much easier to identify when there is nowhere to hide.

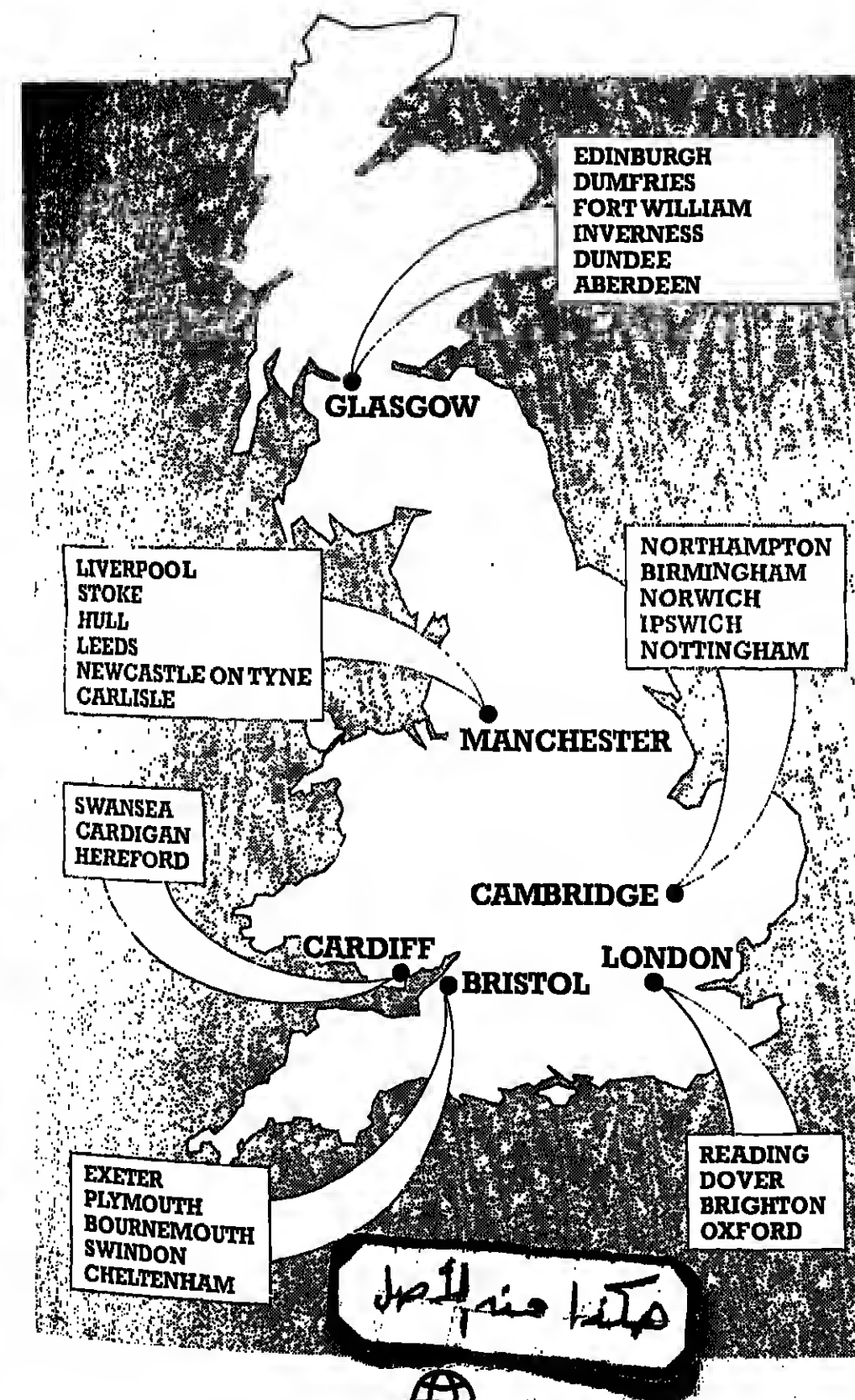
For those who have already decided to seek a new job or may do so in the future there are some basic considerations. Most important is to consider whether changing companies is really as smart as it sounds. If you are happy with your product, your colleagues and your sales success, why move unless you are absolutely sure your career requirements cannot be satisfied where you are?

On the other hand, if you are absolutely convinced that your career objectives can only be met by moving, be sure you do so only after consideration of what you want from your career, how you can achieve it and the kind of companies where it can be found.

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GUIDE TO DP TRAINING

Alan Simpson beats a path through the mass of training schemes

An industry with 24,000 vacancies can't be all doom and gloom

DP training, it seems, is a matter of considerable interest — and irritation — to the DP industry.

Far from being a background service enterprise which it is hoped will produce suitable candidates or enhance existing skills, DP training has become in the past year a factor of front-page headlines, controversy and not a little agro.

For a start, a specially designed training course to help the uninitiated would be useful. The items on this train-it agenda would include an explanation of such terms as Tops, Threshold, BEC and associated TEC plus SCOTCC, MSC, PER, ITC, RSA, CGLI, OU, IAM and not least IMS.

A quick discourse would also be helpful on the education and examination roles of such bodies as the British Computer Society, the IDPM and the NCC and an evaluation of their respective education and training qualifications.

Possibly the most newsworthy is the Tops scheme, organised by the Manpower Services Commission. In particular, the Tops courses have come un-

der heavy flak from the IDPM, which believes that an industry register should be established to assist qualified Tops trainees to get into computing. Co-operation between the industry and the Commission is a matter of some urgency, the Institute feels.

At a time when the recruitment needs of the industry are not expanding, the increasing rate of production of qualified trainees is a troublesome matter. With a current estimate of over 7,000 DP personnel actively seeking jobs, prospects for first-time entrants are not bright.

However, when balanced with the shortage of programmers and analysts, currently reported as exceeding 24,000, the DP recruitment outlook is far from total gloom and doom.

Few would deny that the MSC is on the right track, particularly with regard to its ITEC centres which are designed to train, in the main, unemployed youth in basic computer technology.

Given the impetus of the Information Technology Year publicity machine, companies are being encouraged to adopt the concept of the

automated office. The resultant requirement for operators, programmers and controllers will be considerable for some time to come.

DP training in the 1980s will involve the office manager as much as the computer graduate. Possibly the most frequently heard question being asked by the company management of anyone in or on the periphery of data processing, is "How do we get started?" and the equally unanswerable question "What computer system do you recommend?"

Even the most raw ITEC recruit would have no hesitation in answering that it all depends on individual requirements, both in the short and long term.

Given such a general air of uncertainty, it is not surprising that computer appreciation courses have become a strong growth area. Companies such as ITB, which offer both internal and external courses in basic appreciation and awareness, report that they are attracting representatives from both large and small companies.

The larger organisations are sending members of their junior management

teams to gain a working awareness of the potential of the micro. Meanwhile, the smaller company representative is likely to be a senior director or partner, anxious to grasp the basic appreciation principles of computing technology.

Dr Adrian Stokes, director of computing at St Thomas' Hospital, who runs the ITB computer courses, believes that only a few companies are fully aware of the potential benefits of the micro — or the potential menace. Putting a micro into a company should be a controlled operation, preferably masterminded by one individual. Otherwise the organisation could end up with an assorted collection of incompatible Apples, Pans and DECs.

Closely involved in all levels of DP training is the NCC which, at the micro end, provides centres which supply user training and the opportunity to select (but not purchase) ranges of equipment.

Keith Holden, who is responsible for the NCC training consultancy service, has a full-time task merely keeping pace with changing technology and user requirements.



STOKES... Putting a micro in a company should be masterminded by one individual.

Training new recruits to the industry a few years ago involved as few as 500 individuals a year. Now this number of programmers alone is needed each month. The NCC reports that the past year has seen a decline in the demand for new recruits, a factor which is being exaggerated by the movement of DP personnel between installations. As a result, Tops students are finding it difficult to get past the Threshold of the computer room.

However, the NCC sees the recruitment situation improving, but probably not to the previous job vacancy levels. Holden states that there is a strong question mark on the demand for Cobol programmers in the computer industry. The introduction of micro systems and application, operating and generator

software packages will likewise reduce demand for trainees. Despite this, the NCC reports a continuing demand for training particularly in such newly emerging areas as Cobol 80X programming which will have a worldwide effect on all installations.

At the same time, in-house training awareness courses must respond to the introduction by manufacturers of new computers and communication technology. In turn, it will be the responsibility of senior programmers to translate the new features to their teams. On a wider basis, the NCC has established what it calls IT Circles. These aim to create a series of workshops which can respond to users' collective needs in the various developing areas of technology.

The circles often trigger a

demand for specific training courses with the result: material being used as a basis of possible regular NCC courses. The NCC provides a series of public sessions both in London and Manchester covering all important DP technology areas as local and public domain networks.

The greater use of package software has encouraged the NCC to set up a series of software appreciation courses for company management. These will include such well known packages as VisiCalc and Wordstar.

Away from DP appreciation and awareness training courses, computer training is a matter best handled by the many specialist training companies. Although sometimes expensive, these courses offer professional expertise in many levels of layers of technology.

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- Mini computer experience (useful but not essential)
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- Outgoing personality and the ability to communicate.

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OPS JOBS

Operators will switch from a 'shop floor' to a supervisory activity, says Margaret Park

Not so much a dying breed, more a change of role

COMPUTER operators are like whales these days. Controversy surrounds the question of whether they are going to survive as a species and even whether it's desirable that they should.

What is certain is that the whole operations function is about to go through a radical change.

The metamorphosis of operators is one effect of recent progressions in data processing. Operators are the mainstay of the big mainframe computer installation. Sometimes described affectionately as "tape slaves" or "tape apes", they are responsible for running each job on the computer.

They are there to see that the machine gets the input information it needs, that the right sort of output is produced at the end of each job, and that jobs are run on schedule.

But mainframes are stepping aside for minis and micros which don't need operator intervention.

The operator is really a sort of interface between the user and that strange and frightening machine chugging away in the bowels of

the building.

But in the last ten years computing, as well as getting cheaper and smaller, has moved towards letting the end user do as much of his own work as possible.

So with distributed processing and micros, the user - the accountant or salesman, for example - inputs his own data and gets back information via his own VDU.

In mainframe processing, operating systems are becoming more capable and there has been a big step forward in the sophistication of operating software.

Last month Computer Associates brought out an operations tool called CA Scheduler which does for a mainframe (CA's software is aimed at IBM machines) everything that an operator would do.

Scheduler is a high level control language which analyses the jobs to be done from information stored in its in-built database. It has a testing function which leads it to a decision about the priority to be given to various jobs, and totally automates the business of

monitoring efficiency, timing and documentation of programs.

Each job is defined in the database and any external personnel merely have to update that database information if necessary.

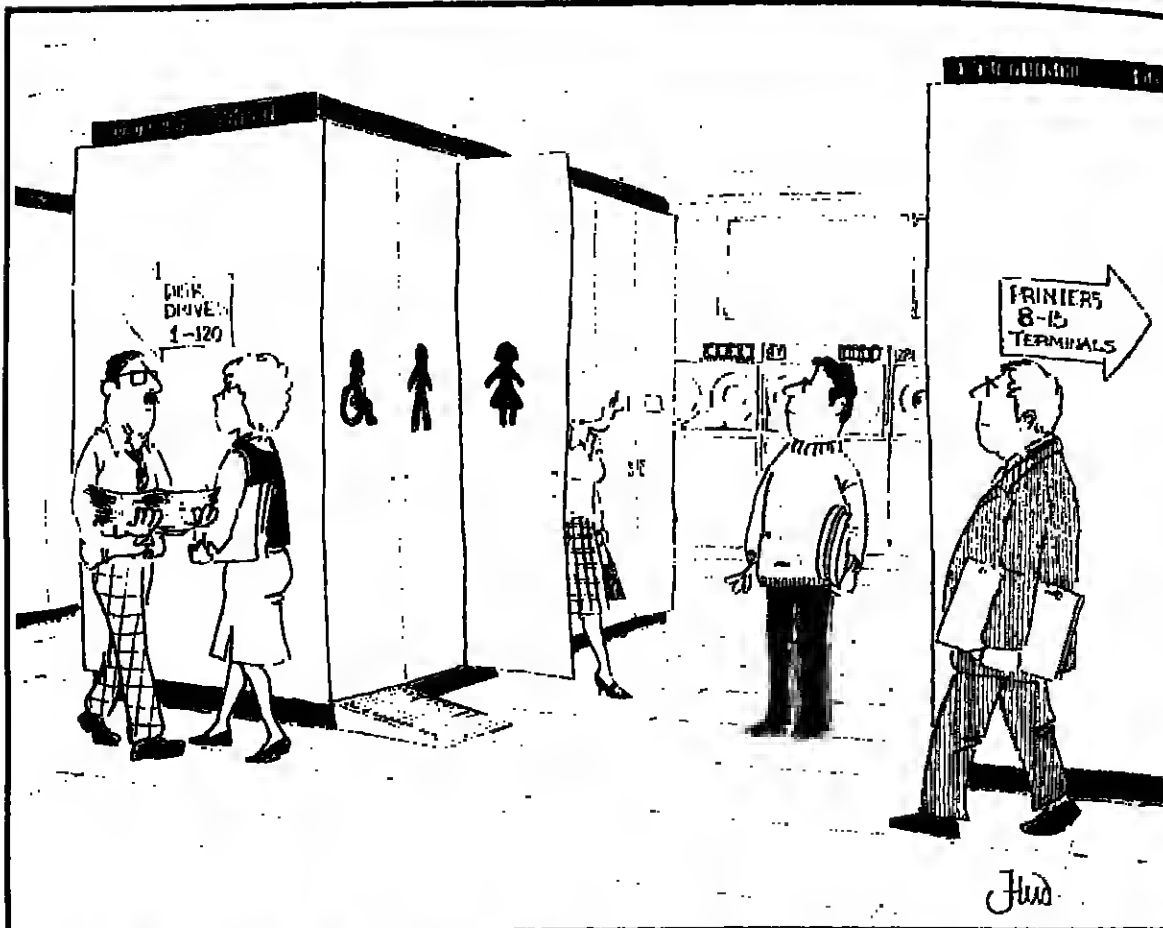
When CA launched its operations management system, as it is called, managing director Harry Gordon said he wanted to "automate the last department in DP."

The point is that mainframe computing has to keep pace with other developments. If a user finds that a big centralised system is going to be complex and expensive to run in terms of clocking up a large salary bill for operators, then he's likely to turn to micros or distributed processing.

But this is not to say that the death knell has already sounded for operators. It means that their function is going to undergo a dramatic change.

Instead of being the "shop-floor" activity it is now, operations is going to turn into a much more supervisory activity.

The job will be upgraded, but as is usually the case when job functions change and become upwardly mobile, there will be fewer operators around.



the attentions of a team of operators.

A survey of salaries and the cost of living, published in October, discovered that already computer operators don't exist in their old numbers.

Peter Brown, of Reward Regional Surveys, which produced the report, said: "Computer operators do not represent a significant job category in most of the companies we surveyed."

"Only very large firms still run mainframe installations. In almost all the companies we sampled,

minicomputers are being installed in user departments," he said.

So rare a breed are operators these days that they didn't even merit a mention in the survey's look at salary averages and increases.

All this sounds like gloomy news for operators. But the message has to be that operators must realise how things are changing and be prepared to make themselves upwardly mobile in the jobs market before the market leaves them standing.

Existing operators are either going to slot into the supervisory role that seems to be being carved out for them, or they will think about moving on to programming.

The operator's job, like all those at the production stage of any process - manufacturing for example - has undergone more changes than any other DP function.

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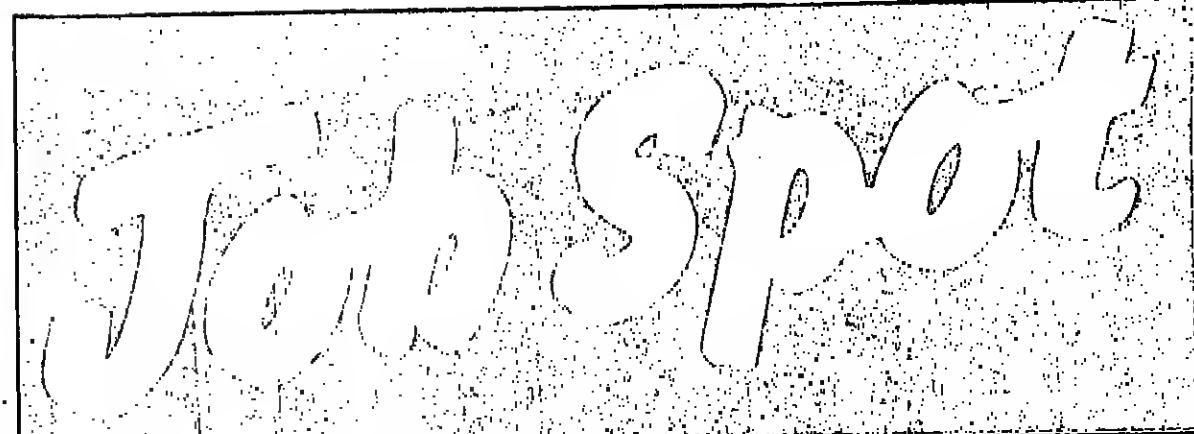
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London/Bucks: £7,750-£8,500+Car

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Experience must consist of at least 12 months' programming in an HP 250 or 3000 installation. Client contact is an integral part of the work and the successful applicants will have initiative together with the personality and confidence to represent the company in a professional and business-like manner.

Excellent career prospects are complemented by an outstanding benefits package including relocation. Ref: 1111/E

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For further information, write to Computer Professionals quoting the advertisement reference no; alternatively phone Isobel Bruce or David Fletcher on 01-584 8790.

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MARKET FOR PROGRAMMERS

As turnover has slowed down, so have competitive salaries in what remains a healthy field, says Margaret Park

THE job market for programmers is one of those much discussed and rarely settled issues that appears to change with the speed of the British weather.

Every shock-horror scare about programmers' future has been aired, denied and argued over.

First criticisms were that programmers were so badly trained that they were unemployable before they began their careers. The government sponsored Tops retraining schemes have been under heavy fire for attempting to teach too much in too short a space of time and with inadequate teachers and facilities.

"Tops students always need training from scratch when they arrive on site," said one exasperated employer. "More damage than good has been done by the Tops courses - they have to be completely re-educated in programming techniques," he added.

Other employers aware by Tops graduates, and will accept no substitute. Star Computer Group went for a job lot of 10 Tops graduates in August. All were taken on as programmers.

The recruitment market for programmers is not quite the boom area it was a few years ago. Then programmers seemed to have an unlimited choice of jobs, salaries and locations.

For graduates from universities and polytechnics, salaries and prospects in the computer industry soared way ahead of every other profession. Numbers of undergraduates studying engineering and computer science even threw up their courses in favour of immediate cash.

Downturn has brought a change in programmers' jobs



"I want whoever programmed these robots in my office NOW!"

Jobs were in such plentiful supply that getting the actual degree wasn't always a necessity.

But from 1980 onwards the recession slowly started to bite even in this self-sufficient corner of industry.

Consequently programmers and other computer workers have become just like every other employee. They think long and hard before throwing up one job to move to another.

So as turnover has slowed down so have the competitive salaries.

But the job market for programmers is still a healthy one.

The way the downturn has showed itself is not so much in a shortage of jobs but more a change in the sort of jobs on offer.

Businesses have been forced to tighten belts in every department, and in the computer department

this means cutting down on numbers, as it does everywhere else. Instead of recruiting teams of staff with general programming abilities, employers are concentrating on taking programmers with particular skills.

John Haigh, a consultant with AB Executive, a Bristol recruitment agency said: "Our clients are looking for skilled staff with three or four years' experience in

particular disciplines."

In his area, he says, employers are after good project leaders and systems analysts with an understanding of production systems for manufacturing.

DP managers are spending their salary budgets on essential co-ordinators and team leaders, so to some extent lower level recruitment is having the hardest time.

The answer for newly qualified programmers is to be flexible in terms of location - there's always a demand for programming staff in the less sought-after parts of the country.

That is, of course, if would-be junior programmers are prepared to be paid slightly under the odds. More experienced programmers, for example, are not anxious to take jobs in places like the West Country where salaries are less than in London or South-east.

So this state of affairs leaves a less competitive job market for first-jobbers.

Employers are also advising programmers to specialise. The direction in which DP is developing - away from big mainframes and towards distributed processing - means that specialisation in functions such as teleprocessing and database design are replacing general programming skills.

Using contractors can be an economical way of coping with fluctuations in workload. But one agency manager says that the demand for specialists applies to contract programmers as well as full-time staff.

This supports the agencies' explanation about why employers are still keen to use contractors. Temporary workers are likely to be called for when an installation has a special job underway. It may be converting its system to include TP, for example, or switching

hardware completely and in need of a complete system rewrite.

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PL1 Programmers

City c.£8K +

Several vacancies for programmers with about 2 years' experience of PL1 exist with a major financial institution. IBM 4300 series machines are installed running under VS1 moving to MVS next year. Knowledge of IMS would be an advantage but is not essential. This is a good opportunity for programmers to advance their careers in a progressive environment. There is an excellent employment benefits package. Ref: L102

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MARKET FOR ANALYSTS

Up-to-date analysts will be in increasing demand

As the use of computers spreads through the professions, the market for analysts remains healthy, says Margaret Park

THE market for systems analysts looks set to be a healthy one for some time.

Analysts are not threatened by new developments such as program generators and operations software.

As long as analysts keep themselves up-to-date with technical advances, their own task is unchanged and increasingly in demand as the use of computers spreads through the professions.

Numbers of systems analysts have moved on from programming, discredited in many cases with their limited role in the business of putting a computer system together.

Analysts can be more varied, connected as it is with systems design and systems development. But there is some disagreement among employers in the industry about what systems analysts actually is.

Most say that their analysts are technical people, usually specialists in a particular brand of hardware or an application, perhaps consultancy systems or databases. As well as visiting clients and analysing their needs, this sort of systems person will also take part in the design and implementation of the final system.

Others, who must be noted because they include big employers such as Computer Analysts and Programmers (CAP), say that their analysts don't concern themselves with the technical aspects of putting a system together and instead are simply business analysts.

Alan Gough, a training manager at CAP, said that for his analysis staff the computer is just a black box. "They are concerned with organisation and methods," he said. "They think about the movement of paper around an office, and how that process can be computerised."

Gough spoke out against taking on technical staff as systems analysts. "People who move over from programming think more at the user's site about how to implement a system on the



HOLDEN... NCC draft proposals emphasise methodologies more than ever.

computer and not about the user's needs.

"We prefer to feed in people with knowledge of other disciplines, consultancy for example, who will be more user-oriented."

So at companies like CAP, systems analysts are business experts with an eye for management theory and methods of organisation. But most would be analysts are more interested in a job which includes making decisions about equipment and software.

About 12,000 analysts worldwide have a qualification in the subject which is administered jointly by the National Computing Centre (NCC) and a sub-group of the British Computer

Society known as the Systems Analysis Examinations Board.

The syllabus of the course reflects changes in systems design and fashions in design methodology.

The syllabus is currently under review. Keith Holden of the NCC said: "Proposals have been submitted both from us and from the BCS about how the course material should be updated. We want to introduce more on recently developed technology and systems design techniques."

"Systems design has moved from batch oriented systems to online facilities and more recently on to distributed systems and databases.

"The NCC's draft proposals emphasise methodologies more than ever," said Holden. "And we want to update the course to include more on networking and data communications."

Holden denied that the trend in systems analysis is away from mainframes. "Although micro and mini are being used more and more in things like local area networks," he said, "analysts aren't in a position to know on a machine above another."

Systems analysts have to keep pace with many controversies about design techniques. Methodology (that is, techniques of systems design), flood into the UK from the US and interminable discussions about the merits of each are constantly underway.

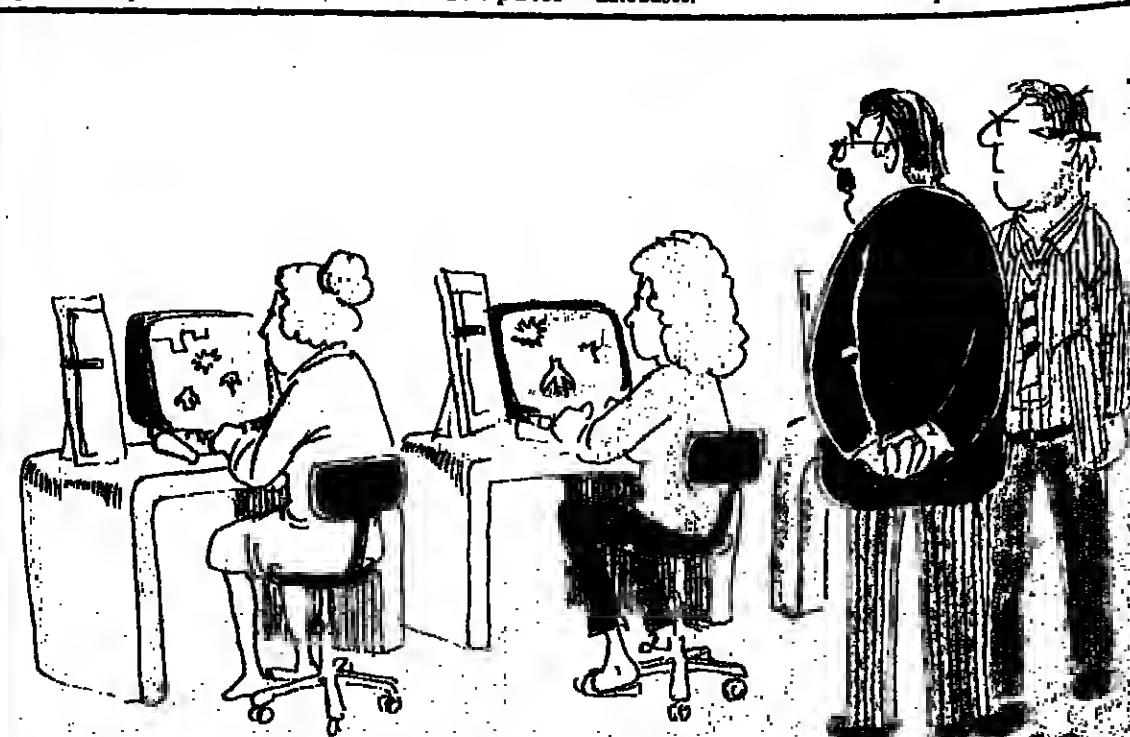
The NCC did its own survey on the design methods that are being taught and applied in the UK. "We concluded that a lot of jargon was being introduced for the sake of it," said Holden. "One of us seemed to be useful: the Youdon method for example is one of the most widely used."

The NCC admits that having a qualification in analysis is not important in the job market. About 1,000 students a year take the NCC paper, either at technical colleges or sponsored by employers with companies like Altergo which has commercial training divisions.

But it is uncommon for employers to ask for qualifications from would-be analysts - they are more interested in experience.

Opinion in the industry that employers will see make questions about systems methodology a part of their job selection process. Analysts will be asked which they favour and which they have experience of.

"Analysts are having to re-educate themselves," said one employer. "They'll eventually be in trouble if they choose to ignore progress in design techniques."



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(1658)

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The Department of Design seeks a computer software graduate, skilled and motivated, to join a team of Design researchers and practitioners who are working in the closest conjunction with the architectural/design industry on specially designed programmes for architects and designers. To date, the concentration has been on low cost hardware support systems which are currently being tested in an architectural practice by one of the researchers. The requirement now is for a design-aware computer scientist who will be able to work with designers on very open-ended as well as very tight briefs. The person appointed will be able to join a small dedicated group; will be self-motivated, capable of enjoying hard work for three years; will be determined to gain a CAA Higher Degree (PhD); and wishes to bridge the gap between the architectural/designer and the computer world. One area of rapid investigation is that of full three-dimensional visualisation/modelling. Emphasis is on form, texture, colour and pattern; shadows would be welcomed.

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Meet reply by December 1982. The post will be filled January 1983. For further particulars and application form please contact: Personnel Officer, TESSIDE Polytechnic, Borough Road, Middlebrough, Cleveland YO42 2EJ, tel. 4114.

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Application forms and further particulars can be obtained from N. Savage, Assistant Secretary, University of London Computer Centre, 20 Gifford Street, London WC1H 1DZ. Telephone No. 01-405 6400, extension 341. Applications should be returned by December 1st, 1982.

(1653)

DURHAM UNIVERSITY LIBRARY SYSTEMS LIBRARIAN

Following the successful implementation of the DEC on-line circulation package in the Main and Science Libraries and in-house catalogue production based on LCCS-supplied records in the Education Library, we are now looking for an experienced Systems Librarian to help us maintain these and other developments and plan progress towards integrated systems for a new library building to be occupied in 1984.

The salary will be on scale VA £13,575-£17,105 p.a. with the possibility of promotion to scale IB £10,870-£13,500 p.a. together with the usual university pension arrangements.

Further particulars may be obtained from the University Librarian, Durham University Library, Palace Green, Durham DH1 1TA, to whom applications (one copy only) should be sent to arrive by Monday 22 November, 1982.

(1418)

Nene College Northampton

Computer Centre

SENIOR COMPUTER OFFICER (Systems/Support) £7,500 p.e. minimum New VAX System

The Computer Centre is in the first phase of a three-year development plan which includes the installation of a new Digital VAX 11/780 computer.

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Applicants for the post will ideally be educated to degree level, and should have three or more years' relevant experience at a senior level in a systems programming or programming environment supporting multi-user applications.

Application form and further details send see to Deputy Senior Administrative Officer, Nene College, Moulton Park, Northampton NN2 7AL. Closing date for completed applications Friday, 28 November, 1982.

(1548)

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A degree or similar professional qualification is desirable but the selection emphasis will be placed upon proven ability.

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Applicants need at least three/four years' experience in a software support role preferably on a distributed network of mini-computers.

Successful candidates will provide software support to Applications Programmers, Analysts and Operators across our own computer network. A knowledge of FORTRAN/COBOL, Data base and Communications will be an advantage.

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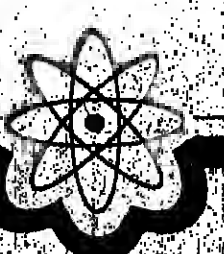
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RECRUITMENT TO TOP JOBS

Demand is now considerably below the level of supply for DPMs and ops managers, reports Alan Simpson

Room at the top is limited for senior DP people

FOR senior DP personnel there is little room at the top. The normal laws of supply and demand have been suspended with demand levels considerably below the level of supply.

Recent surveys suggest that for every senior DP position advertised, 30 or more applicants can be expected, many of whom are highly qualified and experienced. This response compares directly with that generated by programmer or system analyst vacancies where, all too often, only a handful of replies can be anticipated.

Room at the top of the DP industry is noticeably limited, particularly as those who already have possession are reluctant to move over, on, or out of their positions. This pulling-up of the DP job drawbridge is understandable given the general contraction of company operations, budgets and industry job vacancies.

For many companies, it is more a time to batten down hatches than to undertake extensive and expensive DP projects. The role of DP and ops managers in such circumstances is to make the best possible use of existing resources and keep within operational budgets.

However the more forward thinking DP executives will use this period of

uncertainty to look ahead, or at least round the next IT corner. It is a corner full of technological promise for both individual and company.

Even if the present time is not right for investing and planning for information technology, at least a general awareness of the possibilities is essential.

For many companies, the incorporation of such technology is already a fact of operational life, which will in turn encourage other

team must become closely involved.

Company user management may relish the idea of gaining processing independence, but it is essential that one individual be responsible for ensuring that the organisation is getting the best possible in terms of suitability, price, support and not least, ongoing servicing.

The micro revolution is having the result of converting many DP and ops managers into information technology managers, a

management. Without a close familiarity with company operations, the DP team is hampered in recommending the introduction, for example, of word processing or facsimile systems.

"After all", Cluff states, "word processing and allied technology are all computer based and must therefore be assumed to be the responsibility of the DP team."

The IDPM is not alone in believing that there is too much concentration in the DP industry on job titles - this despite the fact that senior programmers are often paid more than the ops or DP manager.

The accepted route into DP and operational management has long been that of being in the right place at the right time. The right time could be the period when the company was updating its basic accounting system to a mini or mainframe machine and those already involved moved in line with the configuration.

Another familiar route was that of joining the company as DPM from the sales and marketing teams of the manufacturer. This route, however, is facing something of a change of direction with DP teams often keen to join the suppliers or a leading consultancy group.

In other cases, the DP management team have arrived via the accountancy side of the company and subsequently stayed with the installation.



"We've got all the management reports to print so load the printers with offcuts of stationery and worn-out ribbon as usual."

London, believes it is vital for existing and prospective DP management to plan as far as possible their future careers.

A further well documented route to the top has been by promotion through the DP section. This route, which has always been lined with obstacles, has now become more hazardous. Even the DPM finds himself being replaced by professional specialists who are highly competent in such areas as telecommunications, telereports or telephony. A knowledge of laser beam technology is of more benefit than close contact with PCM printer and terminal suppliers or company computing procedures.

More and more DP executives are turning to career counselling. John Merrifield, who heads the Michael Drayton recruitment organisation in central

London, believes it is vital for existing and prospective DP management to plan as far as possible their future careers.

Many companies are looking beyond their immediate requirements and seeking staff who can guide and lead the organisation into new areas of technology. This involves not only machine and man management, but appreciation of the role of trade unions and the many company and employment Acts.

Merrifield emphasises that future IT managers will be all-rounders no less competent in personnel relations than in high technology. Michael Drayton believes that a blanket approach, or response, to senior job appointments should be avoided. Each separate placement or job opportunity

should be approached as an independent application.

For the operations manager, the present time is certainly one of challenge and opportunity. New levels of technology are being introduced seemingly weekly, and are cost effective systems.

It is essential therefore the ops manager to keep a touch and fully informed. With the data processing requirements of companies becoming ever more critical, information has become an essential ingredient of company management decisions making processes. The DP job marketplace may currently be limited, but a company's reappraisal of information processing requirements, a strong demand could emerge. DP management should be ready for the market.

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Computer Weekly carries a large volume of appointment pages every week. Now a special section for senior appointments will enable readers to locate suitable job opportunities more conveniently. At the same time, this new facility will provide advertisers with the option of securing a premier position without extra cost.

One of the special but important features of this new section is that only those jobs offering a basic minimum salary of £14K will be eligible for inclusion in "Top Jobs". This restriction will add considerable prestige to the section and the positions advertised.

Computer Weekly provides the most comprehensive news coverage of computer users and the computer industry. Surveys have shown the newspaper to be the most widely read computer publication in Britain. With a circulation of over *100,000 every week - 32% at senior/managerial level - Computer Weekly is your best choice for all computer vacancies, as well as those important Top Jobs.

Because of the strict salary level restrictions we are enforcing, and the subsequent advanced production arrangements necessary, all space reservations for the "Top Jobs" section must be received in London by 4 p.m. Friday before publication date.

To reserve space please phone Shobhan Gajjar (Direct Clients) or Julie McNally (Consultancies) on (01) 661 0121.

* Circulation ABC January-June 1982 - 100,263

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(1497)

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THE MIDLANDS SCENE

Bosses — and staff — are very choosy

Job opportunities in the Midlands and Birmingham are assessed by Chris Thornton

THERE are jobs in Birmingham and the Midlands — but firms are very choosy about who they take on, and computer staff are very choosy about where they go, because most of them prefer to hang on to what they've got in times of recession.

"Users are fussy about the type of skills they want from their staff, whereas two or three years ago they were just glad to be able to get people," said one Midlands recruitment specialist.

"We've had more rejections of job offers recently than ever, which indicates that people don't want to move unless they have a very good reason for doing so, like being offered a lot of money or going to a more interesting job."

"But we've found that firms are no longer prepared to offer the earth to tempt people to move. Employers aren't keen to get involved in auctions for the services of computer staff. They are trying to stagnate the salary market."

The current recession is the reason for the gloom. Birmingham and the West Midlands, with its heavy industrial base, has been particularly badly hit. The recession has hit development budgets as firms have tightened their belts, and very often the first department in a company to be hit is data processing.

Managing directors of companies and their boards of directors may want development work to go ahead, but when they learn from the data processing managers that to continue with a project would mean taking on more staff, they balk.

And as they often find themselves having to lay off and make people redundant from other sections of their firms, they understandably fight shy of offending unions by sacking people on the one hand and at the same time taking on new computer staff with the other.

But things aren't quite as gloomy as they appear. For one thing, there are few experienced computer people on the dole in the West Midlands. The problem is that people aren't moving because they are frightened to

do so, and the postponement of potentially exciting new projects means there isn't the work to tempt them.

But the signs are that the market is beginning to stir itself. "There are definite signs that things are starting to happen," said a recruitment specialist. "Six months ago job prospects were abysmal, but now things are getting brighter, and it should continue that way for the next few weeks, at least until we reach the post-Christmas period, which is a traditional time of depression in the job market anyway."

"After Christmas I hope things will get better. And if the government's rumoured

right comment of one post-mistie recruiter, but even he admitted that things were improving.

Tops students and trainees are always the one to suffer in times of recession. "If you're experienced and obviously talented, there's always likely to be demand for your skills," was one typical comment from an employer, "because we can always find room for exceptional people. But if we're taking on people who we want staff who can produce the goods immediately. And trainees are likely to do that."

"If people have vacancies," said another Midlands recruitment agency, "they

If people have vacancies they are quite prepared to wait until they find the right person rather than fill the vacancy yesterday

autumn mini package, with particular aid to West Midlands industry and new technology is true, then they might improve considerably by next spring."

Most Midlands recruiters feel there will be an upsurge in the job market once the recession is over.

"It takes a while, though, for the effect of lower interest rates and a decrease in inflation to be felt at the recruitment end," said another specialist. "I think it will be next spring before the job market improves, but things are getting better."

"At the moment there are more opportunities for programmers with average experience. Things are very competitive at project management level. Data processing managers and other senior managers have no chance of getting jobs; and the market for contractors, which is never particularly good in the West Midlands at the best of times, is depressed."

"The only people with genuine grounds for optimism are sales executives, but then there's always a shortage of good salespeople — and there's really no market for operators."

"The market is Doomsdayville" was the forth-

are quite prepared to wait until they find the right person rather than fill the vacancy yesterday. They are saving money that way — although in the long term that may not necessarily be true — but in times of belt tightening and cutbacks it makes sense for them not to have to pay a salary for a month or so.

Over in the East Midlands — Leicestershire, Northamptonshire, and Northamptonshire — the picture is brighter, but not by much, and only because industries are more diverse in the East Midlands. It is the heavy manufacturing industry of the West that has been hit worst by recession.

On the bright side, there are always new users appearing (people still buy computers, even in recession) and that means opportunities for both temporary and permanent staff. An exceptional agency sometimes reports it has "a lot of activity". But they are very much the exception.

Overall, Midlands agencies report a feeling of optimism and can "see light at the end of the tunnel". But a lot of Midlands' bosses are pinned on an autumn package from Mrs Thatcher.



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WEST COUNTRY RECRUITMENT

Chris Thornton looks at an area where 'opportunities for work are superb if you are prepared to put yourself out'

WHILE Bristol City football club has dropped from first division to the foot of the fourth in three spectacularly disastrous seasons, Bristol and its surrounding west country has been transformed from a high technology backwater into a first division outfit.

For in recent years Bristol and the West have enjoyed a good deal of success in attracting high technology companies for the area, joining a long tradition of established advanced engineering outfits like Rolls-Royce, British Aerospace and Westland Helicopters.

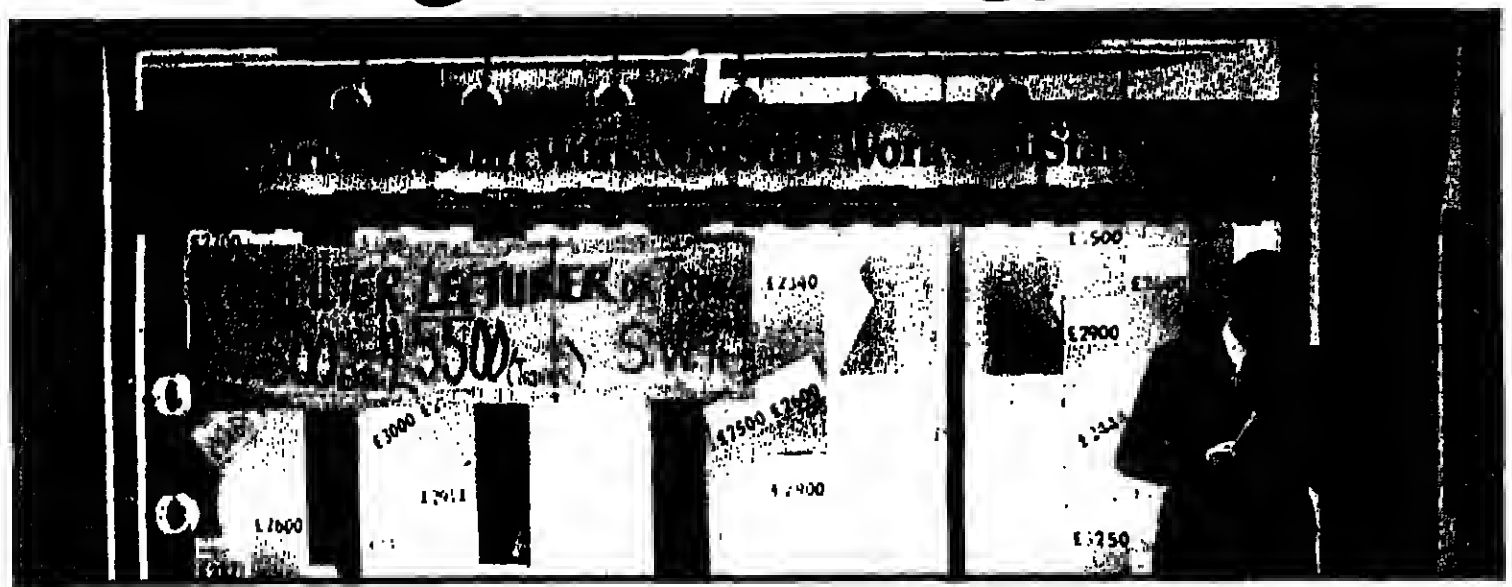
This tradition has resulted in a pool of skilled labour, and the output from the area's universities and polytechnics has supplemented that pool.

In addition, Bristol has always been a financial and commercial centre, has beautiful surroundings, and with the advent of high speed trains and the opening of motorways like the M4 and M5, has become a communications centre, with easy access to South Wales, the Midlands, the Thames Valley, and the rest of the South-west region.

All those advantages have lured high technology companies to the region. There's Logica in Swindon, Marconi, Sperry Gyroscopic, Fairchild and Hewlett-Packard in Bristol, while Philips Business Systems plans to open its headquarters in Swindon in two or three years.

"Opportunities for work are superb if you are prepared to put yourself out," says one recruitment specialist working in the area. "Swindon and Bristol

Bristol back in first division — as a high technology centre



are growth areas, with a lot of companies moving to the area, and there have always been insurance and finance companies like Hambro's, Eagle Star and Sun Life."

Add to that list Phoenix Assurance, Clerical, Medical and General, Trident, Mercantile and General, Lowndes-Lambert and National Employers Mutual, all of which have offices in the Bristol/Gloucester/Cheltenham/Swindon area, and just think of how reliant commercial and financial companies are on their computers, and you have an idea of the scope for

employment in the West. Yet Wales and the West Country have long appealed for the scenery and as places to spend holidays rather than as places to hit the big time in terms of career prospects.

This is partly because of low salaries. There are usually plenty of vacancies in places like Somerset and Cornwall but they are not filled because salaries are below what programmers and computer staff have come to expect from other areas.

But salaries in the growth areas around Bristol/Swindon/Bath are catching up on

and rivalling those in the South-east.

"Employers in Britain's Silicon Valley — as the West is known — automatically pay good salaries to attract the right sort of people," says one recruitment specialist.

And Keith Gay, associate director of AB Executive of Bristol, says that whereas once salaries in the West were below the South-east and other parts of the country, this is no longer the case — and he says he has one software vacancy on his books at the moment paying a salary of £20,000.

Many large multinational companies with big management service departments, like Burmah Castrol, have their headquarters in the West. "It's an attractive area, which is why it draws companies," says Mike Beasley, of Sanderson Recruitment. "Companies move from London to cut costs, but communications are good, the pace of life is slower, salaries are as good as in London, and the countryside is attractive."

"But you have to be good to work here. Standards seem to have risen over the last year or so, and the days

when firms took staff on *en masse* seem to have almost disappeared.

"Nowadays companies look for experienced, talented staff, and will probably find room somewhere for a high calibre person. "Our clients are looking for skilled staff with at least three or four years' experience in particular disciplines," says John Haigh, of AB Executive. "Good project leaders are in demand, so are systems analysts with knowledge of production systems for manufacturing."

Most opportunities in the West are with users. There are some bureau and software houses, but their involvement in the region is patchy, consisting largely of small companies specialising in the scientific market, a particular range of hardware, or the micro product scene.

The Welsh job picture is not so bright, unfortunately, although the Welsh Development Authority has done its bit by attracting GEC, Sony and Hitachi.

"There's work if you look for it," says the one-mistake Mike Beasley, of Sanderson.

Wales and the West will be the answer to newly qualified staff who can't get jobs, or for experienced, talented staff who want these better, well-paid jobs but don't seem to be able to get in their current location, or for people who are fed up with the bustle and back and forth of city life.

"We've got 400 staff in our books at our Cheltenham branch," says Alan Francetta, proprietor of Alpha Computer Recruitment, "and 50 registered vacancies which we're having to advertise because those who are holding out for the top jobs."

Gray says there are certainly a lot of vacancies in the area. "But the problem is recruiting experienced staff."

While pockets of the country may lag behind in salaries, the message for the region as a whole is clear: commerce is on the up and up. You may not be able to watch first division football there any more, but if you're a good programmer, you almost certainly end up with a good job.

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Ref: L/45/A

Strategic Consultancy Greater London : Pkg to £19K

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Ref: L/45/B

Real-Time Programmers Netherlands : Salary to £15K

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Ref: L/45/C

Pascal/UNIX E. Midlands : Salaries to £9K

One of the UK's leading microprocessor consultancies, renowned for its range of products based around the UNIX operating system, is currently seeking a number of Programmers and Analysts. Programmers to be based at its East Midlands development facility. Suitable applicants should preferably hold a numerate degree and have programmed for a minimum of two years in either PASCAL or C on any leading 16- or 32-bit processor. Ideally, you will have some knowledge of the UNIX operating system, but this is not essential since training will be provided. Working as a member of a small project team you will be involved in various applications including Local Area Networks, Office Information Technology and Graphics.

Ref: L/45/D

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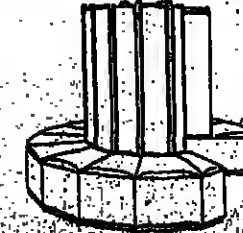
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Ref: L/45/E

Systems Software Herts/Beds : Salaries to £14K

The Communications and Networking Division of a leading Turkey System Supplier has a number of outstanding career opportunities for Software Engineers and Programmers within its recently established Research and Development facility. All candidates must be educated to B.Sc. or H.N.C. standard and have subsequent commercial/industrial experience amounting to three years. Of interest to the company will be those who have software and systems design experience with a packet switching or networking product and in particular communications protocol techniques — X-25, SDLC/HDLC. Certain positions will be exclusively in-house based whilst others will entail a support role. A salary premium will be paid to those who have participated in the enhancement or optimisation of a UNIX or UNIX look-alike operating system.

Ref: L/45/F

Graduate Programmers London & H. Counties :

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A number of exciting opportunities have arisen in London and the Home Counties for Programmers who have recently graduated. You should hold a first or second class honours degree in Mathematics, Computer Science or Electronic Engineering. Of particular interest will be applicants who have completed a sandwich course and can offer 12 months' industrial training experience. It is essential for all positions that you offer fluency in PASCAL, C, ADA or Assembler. Ideally your project work should have included compiler writing, artificial intelligence, UNIX or firmware development.

Ref: L/45/G

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IRISH RECRUITMENT SCENE

Despite the influx of foreign computer expertise, this has not really rubbed off on the Irish, says Della Bradshaw

Eire woos foreign electronics manufacturers to create jobs

UNEMPLOYMENT is a nasty word everywhere these days, but in Ireland particularly so. In the Republic unemployment stands at around 13.5% and in the North it borders 20%.

With computers held up as the scapegoat for many of the problems in the UK it seems rather strange that computer and electronics manufacturers are being wooed across the seas as job producers.

The most vociferous proponent of Ireland has always been the Irish Industrial Development Authority (IDA). It has an arm-long list of the virtues of setting up your computer company in the Republic: Capital grants of up to 60%, training grants of up to 100% and corporate tax rates of as little as 7.8%, not to mention a workforce that barely knows the meaning of trade unions or strikes.

The IDA has had its successes. Foreign companies presently employ about 34% of the workforce, and in computer terms that means the big name American companies like DEC, Apple and Wang, which has recently announced plans to increase its workforce from 300 to 1,000, and Japanese manufacturers like Fujitsu, NEC and Sord, which is planning to set up its European research and development centre in Dublin.

But the IDA has also come under fire recently from the government-commissioned report produced by Telesis, a US consultancy. The IDA spends about 11% of the Republic's capital budget, which Telesis says is too much.

The IDA in retaliation can point to its track record in the electronics field. US firms re-invest nearly three-quarters of their profits in Ireland, and although the incentives offered by the

year - which makes the company's aspirations "to become as big as Apple" look pretty bleak. Nor will an extra 20 people make much of a dent in the 180,000 or so who will be out of work in Ireland by Christmas.

On the software front Ireland is moving somewhat faster. There are now about 150 companies in Ireland involved in software production, about 40 of which have been established this year.

"The last time we advertised there was a big response from English people who wanted to go over to Ireland"

IDA are for set-up industries, which in the past has encouraged companies to take the money and run, this has not happened so far with the new breed of electronics and computer manufacturers.

But will all this investment help Ireland out of its economic difficulties?

In spite of the influx of foreign computer expertise, this expertise has not really rubbed off on the Irish. There is only one home-grown Irish microcomputer manufacturer, Transtec, which employs 30 people at the moment and hopes to increase that to 50 within

About 20% of these are attached to the big foreign companies like DEC and Wang, which leaves about 120 smaller software houses, like Information Desk Software in Dublin.

ID's specialises in applications for vertical markets like insurance broking and pub stock control, but Patrick O'Sullivan, the managing director, believes one of the big areas where people are needed is in training.

"We've just set up a separate training department which is running courses on CP/M and financial spreadsheets for new users and people who are

thinking of buying a computer," says O'Sullivan. "Another area is support - a lot of people are needed in that area."

There have been quite a lot of "foreign" software houses setting up in Ireland as well, particularly from the US and the UK. It's not the small companies either: Micropro and CAGI are two of the American companies, and Computer Ancillaries and Altergo are from the UK.

Altergo set up in Dublin in 1975 because "there was an oversupply of good-quality graduates there and very favourable incentives to create a company," according to Dick Jones, managing director of Altergo in the UK.

One thing the IDA keeps going on about is the range of training facilities for young people wanting to go into computers and electronics. And you have to admit it does put the UK to shame. At the tertiary level there is the microelectronics centre in Cork, which concentrates on things like gallium arsenide and Josephson junctions. There is also Anco, similar to the Tops scheme - and secondary schools overflowing with Apples.

But whether this is going to cut back unemployment is questionable. The jobs are there at the moment, but are

they being taken by the Irish? According to the IDA only about 2% of DP employees are non-Irish, and many of those are the big wigs at the top of the international companies.

But people like Edmund Howard, who co-ordinates advertising for Irish firms in the UK, think there is a trend towards the employment of British people at what Howard calls the "top end" of the market.

"There are increasing opportunities in Ireland in all areas," he claims, "especially for IBM System 34 and 38 people and on the IMS software side. There are also demands for people in consultancy and for project leaders. The last time we advertised there was a big response from English people who wanted to go over to Ireland."

There are also a lot of people returning to Ireland, after 10 or 20 years abroad, who are taking up high level and specialised jobs in the DP and electronics industries.

With half the population of Ireland under the age of 25 the Republic's workforce could increase by nearly 20% in the next nine years. On top of that there are fewer women employed in Ireland than any other EEC country, so if they decide to imitate their European



Cork, one of Ireland's oldest cities and the European marketing centre of Apple, North Star and a host of other known computer companies.

counterparts it could push that figure up even further.

In Northern Ireland the prospects are even bleaker. The Northern Ireland Development Board, which replaced the Northern Ireland Industrial Development Authority in September, admits that over the past year no new European or American computer or electronics firms or software houses have set up in Ulster despite the massive advertising campaigns and claims of a "new Silicon Valley" in the North. Nor could the NIDB come up with any home-grown companies set up in that period either.

Frank Metcalf of 56 ware Ireland, which went in Belfast in 1979, paints a same bleak picture. "The situation here is very difficult indeed, from the employers' viewpoint. As employers we have no difficulty at all in getting staff, but getting very good people from Queen's University is the problem."

"At the moment we specialise in selling micro and mini systems to doctors, and we think that's a growth area. Training and consultancy are other areas. But generally things are difficult."

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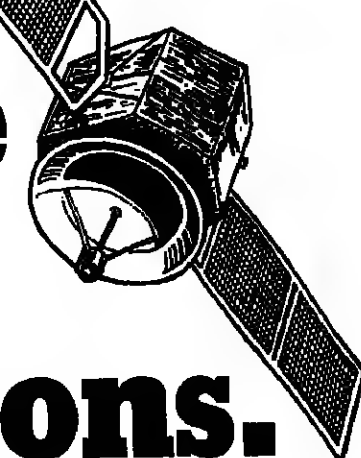
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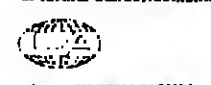


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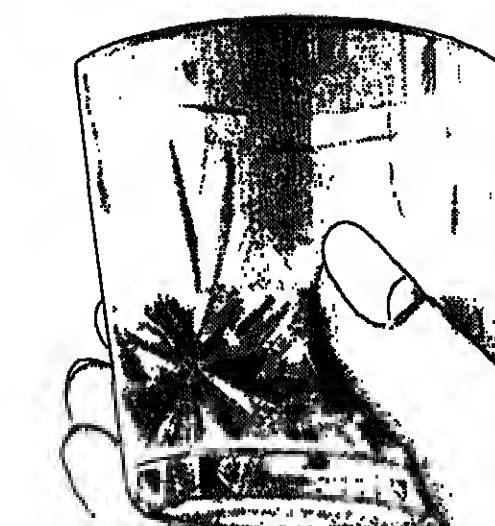
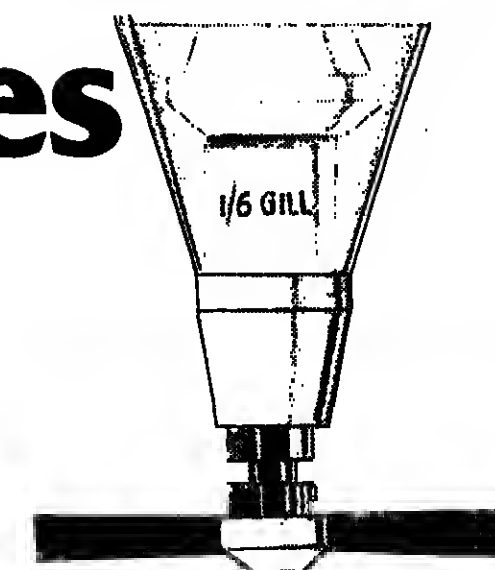
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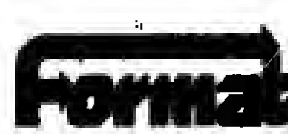
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SALES BIT

Quality of Management - 30

How to avoid being a pig in the middle

A FEW days ago I was having lunch with the managing director of one of the major computer manufacturers (oo, he paid!). Among other things, he mentioned his displeasure at the insatiable appetite of the "corporate users" on the other side of the Atlantic for more and more information and the increasing complexity of detail and presentation of the data being demanded.

Yet he was being confronted by increasing reluctance from his own subordinates to provide any information at all for a variety of reasons ranging from apathy to belligerence.

This was becoming a problem, because much of the information was required for onward transmission to his peers. And he was becoming increasingly out of touch with what was actually happening in the company he controls.

Being a pig-in-the-middle is very common in management, and those in district/area/regional sales management are particularly susceptible to it. On the one hand, the national sales manager is (quite rightly) anxious to know what is happening in the field. Are there opportunities to be exploited or problems to be resolved that need his involvement? Are things going as well or as badly as he believes?

On the other hand, there is risk coming up from territory salespeople, usually in the form of "I've been too busy to write any call reports", or "I don't really see the need", usually in volumes inversely proportionate to sales achievement.

It is a frustrating and potentially destructive sandwich that can ultimately result in the very opposite of what an effective reporting system is designed to achieve.

Resolving this kind of problem although not easy, is not impossible. There is only one starting point and that is the process of putting one's own house in order ensuring that the reporting system between one's subordinates and oneself is effective.

That means it must be brief, relevant and prompt, and interactive. Verbosity, irrelevance and tardiness are a severe handicap for any reporting system, but a total lack of response to one's reporting endeavours, like posting letters in a dustbin,

Having established an efficient reporting system between one's subordinates and oneself, then is the time to involve one's peers. This does not mean you wish to put into effect the same system, but rather to appropriate mechanisms which have the same qualities of relevance, speed, brevity and interaction.

However, the chances are your peers will commend the efficiency of communications between your troops and yourself, while at the same time insisting that you tow the corporate line, if only because that's the way it's always been done.

On the other hand, they might just take a deep interest in your methods and create a new management reporting system based on your ideas. The problem is, could you cope with the shock?

Alan Williams

COURSES

WOMEN with management potential may benefit from a women-only course to be held by the City University Business School in February next year. Managerial Effectiveness for Women includes two weeks of full-time study with an optional follow-up workshop. The course is on personal development and career planning. Suitable applicants are likely to be between 30 and 40, earning £10,000 plus, and at management or equivalent technical levels. Candidates will have been identified by their companies as having real management potential. The course will be held in London, and the fee is £1,200.

Details from Jan Leeming on 01-444 5955.

THE Coventry (Lancaster) Polytechnic has two microcomputer courses lined up for early next year. On January 4-5, a workshop entitled Engineering Applications of Microcomputers is intended for engineers and technicians of any discipline who have an interest in the application of micros to sequence control, closed-loop control, measurement and data logging. The Microcomputer Workshop, scheduled for January 6-7, is intended for those who have little or no knowledge of microcomputer systems. Details from Carolyn Hall on (0203) 24166 ext 7606.